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America and the New Global Economy

Course Guidebook

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Timothy Taylor is managing editor of the prominent *Journal of Economic Perspectives*, a position he has held since 1986. The journal is produced at Macalester College and published by the American Economic Association, and it is the most widely distributed and read journal of academic economics in the world. Professor Taylor graduated from Haverford College, where he majored in Economics and Political Science. He holds a Master's degree in Economics from Stanford University.

Professor Taylor has produced several courses for The Teaching Company, including *Economics* (now in its 3rd edition), *History of the U.S. Economy in the 20th Century*, and *Legacies of Great Economists*. In 2007 Professor Taylor published *Principles of Economics*, the first textbook that is available as a free, advertising-supported download from Freeload Press. From the late 1980s to the late 1990s, he wrote op-eds on economic subjects for the *San Jose Mercury-News*. He has published articles on globalization, the new economy, Medicare reform, and outsourcing.

Professor Taylor has edited a wide range of books and reports, including books on school reform, airline deregulation, and pensions for the Brookings Institution; a history of the chemical industry; and the World Bank's 1999/2000 *World Development Report*. He has consulted with the Social Security Administration and the Federal Reserve on the organization and content of their regular reports.

Professor Taylor received the award for excellent teaching in a large class (more than 30 students) given by the Associated Students of Stanford University. At the University of Minnesota, he was named a Distinguished Lecturer by the Department of Economics and voted Teacher of the Year by the Master's degree students at the Hubert H. Humphrey Institute of Public Affairs. ■

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SUPPLEMENTAL MATERIAL

America and the New Global Economy

Scope:

The global economy has become more interconnected than ever before. More goods and services are produced in one country and sold in other countries. More people migrate between countries. More investors around the world are sending their funds to other countries. These stronger economic connections have helped to bring greater prosperity to billions of people around the world.

But the tightening of these connections can bring tensions, too. In the 1950s and 1960s, other countries were interesting to most Americans mainly for their cultures or as occasional tourist destinations. For practical business affairs, a typical American worker or firm of this time could essentially ignore China, India, Mexico, Brazil—indeed, most of the world. But in the first decade of the 21st century, many U.S. workers and firms compete directly with workers and firms from these and other countries every day, in selling both within the United States and within other national boundaries. As consumers and savers, Americans also face choices about buying products from around the world and whether some portion of their retirement plans are invested in far-off and, perhaps, poorly understood countries. What happens in the rest of the world economy now matters to all of us in a direct and immediate way—and the intensity of the global interconnections and potential conflicts is only growing over time.

This course begins with an overview of the development of the global economy since 1950, including the rise of globalization and the diminishing relative importance of the U.S. economy. The main body of the course is divided into two broad sections: first, a tour of the global economy one region or country at a time, then lectures on a number of global economic issues. The focus is primarily on the last few decades, although some lectures will dip back to the 1950s or even earlier and other lectures will consider projections well into the 21st century.

Our tour of the global economy circles the world, beginning with the United States. We move from Western Europe to Eastern Europe and Russia; then on to Asia, with stops in Japan, the East Asian "tiger" economies, China, and India; to the Middle East; to sub-Saharan Africa; and finally, to Latin America.

The lectures for each region or country are usually divided by key moments in time. For example, the first lecture on Western Europe considers the decades of rapid growth in the 1950s and 1960s and the period of strong productivity and low job growth in the 1970s and 1980s, while the second and third lectures discuss how Europe's economy has developed since economic union in the early 1990s and monetary union since 1998. For Eastern Europe and Russia, the discussion begins with a review of the old economy of the Soviet Union, how it functioned and how it failed. Then, a follow-up lecture looks at the experience of these countries as they move from Communism to Capitalism. By the end of this global tour, you should have developed a familiarity with major economic events and issues from all around the world during the last few decades.

The second broad section of the course then considers a series of topics and issues that affect the global economy. The topics begin with the basics of economic globalization, including trade in goods and services, international financial investment, and international migration. Next, the lectures tackle such topics as population growth, poverty, food, urbanization, gender equality, quality of governance, and global climate change. As one example, global population is expected to increase from its current level of roughly 6 billion to about 9 billion in 2050 but then to level off. As another example, about 1 billion people—one in six people in the world—live in extreme poverty, which is defined among economists as living on income of less than $1 a day. These lectures will describe trends, suggest possible causes, and consider policy challenges for such important topics.

These issues aren't the kinds of crises that flare up one month and are resolved the next. As a result, these topics (with the exception of global climate change) are not usually in the newspaper headlines. But they represent fundamental realities that will shape the future course of the world economy. Of course, these lectures on various topics draw freely on the background

knowledge of countries and regions around the world that was developed in the earlier lectures.

The concluding lecture asks how globalization might proceed in the future. Because the U.S. economy remains by far the largest in the world, it is commonly and not without some reason perceived as the face of economic globalization. That said, different parts of the world are experiencing globalization in their own distinctive contexts; the causes and consequences of globalization look rather different depending on where you are standing. The gap between those with high and low incomes around the world has widened over the last century, in part because of globalization. However, in the last few decades, the gap has stopped widening and has even, by some measures, started to shrink. During the 21st century, globalization may well contribute to convergence—rather than divergence—of incomes between the top and bottom, as lower-income countries grow at a faster rate than the United States. In all likelihood, the process of globalization has only just begun. ■

The World Economy since 1950

Lecture 1

Economic globalization offers gains for the U.S. economy and is a triumph for U.S. international economic policy, but even a success story brings its own set of worries and concerns.

The terminology of globalization seems to have emerged in the 1960s, in part from Marshall McLuhan's writing about the "global village." This image captures the idea of greater interconnectedness along many dimensions. The focus of these lectures will be economic interconnectedness.

In the years after World War II, the world economy was relatively fragmented and dominated by the U.S. economy. In the late 1940s, the countries of the world were mainly focused on pursuing separate economic paths. The United States was the one great economic power at the time, while Europe and Japan concentrated on rebuilding from war. The Soviet Union was attempting to show the superiority of a controlled economy. Latin America saw extreme economic inequalities, while Asia and Africa were characterized chiefly by poverty. Analyzing the world economy by population and gross domestic product (GDP) gives us some foundation for beginning our study, despite the shakiness of some of the statistics on GDP at this time. The United States dominated the world economy by size in 1950, with more than one-quarter of total output but just 6% of world population. China dominated world population, with 22% of the world's people, but had only 4% of the total output.

To compare different economies, it's necessary to use an exchange rate to convert from one currency to the other. Because market exchange rates tend to bounce around, they are not desirable for such comparisons. Economists typically use "purchasing power parity" (PPP) exchange rates, which seek to measure the same purchasing power across economies in terms of goods tradable on world markets. PPP exchange rates don't bounce around as much as market exchange rates, but the estimates of these rates may themselves

be controversial. The world economy around 1950 had a low level of connectedness, with relatively low levels of trade in goods and services and relatively little international movement of labor or financial capital.

The roots of modern globalization can be found in three factors: new institutions, national commitments, and changes in technology. Important international economic institutions were created in the late 1940s.The General Agreement on Tariffs and Trade (GATT), which has evolved into the World Trade Organization (WTO), attempted to reduce trade barriers. The International Monetary Fund (IMF) sought to address issues caused by international movement of financial capital. The International Bank for Reconstruction and Development (IBRD), also called the World Bank, attempted to facilitate loans to parts of the world that needed financial capital but might have difficulty getting loans through commercial channels. Many countries in the late 1940s realized that the reductions in world trade in wartime and during the Depression had hurt their economies; thus, they were willing and eager to open their economies to a greater degree of international competition. Significant reductions in the costs of transportation and communication also helped lower barriers to international trade.

The size of the global economy grew more than eightfold from 1950 to 2005, but the shares of the U.S. and European economies declined.

The world economy has expanded in the last half century but has also changed shape. The preeminence of the U.S. economy has diminished, while China and India carry far more weight in the global economy. Further, international trade makes up a far larger portion of the world economy than it once did. Global populations and economies have grown in size since 1950. Overall, world population more than doubled from 1950 to 2006, from 2.5 billion in 1950 to 6.5 billion in 2006. Shares of world population have changed since 1950 but perhaps not as dramatically as one might expect. The population shares of the United States and China declined a bit, while those of Africa and India rose a bit. The size of the global economy grew more than eightfold from 1950 to 2005, but the shares of the U.S. and European economies declined. The shares of

countries across Asia—China, India, Japan—all increased. Per capita GDP offers a rough comparison of standard of living across countries. The U.S. lead in per capita GDP has diminished with regard to Europe, Japan, and China since 1950, although it has increased with regard to Africa. The world economy has become more interconnected in many ways since 1950, with greater trade in goods and services, higher levels of migration, and larger flows of international capital.

In the opening decades of the 21st century, the U.S. economy will be relatively less important in the world economy, and the economies of China and India will become more important. At the end of World War II, the United States enjoyed a remarkable moment of world dominance, which it has since largely maintained. But China's economy will probably outstrip that of the United States in overall size in the next decade or so, and India is now growing rapidly, too. As the U.S. share of the world economy decreases, the influence of U.S. experience and input will diminish in terms of changes in world economic growth and institutions. Understanding issues in the major countries and regions of the world and challenges that confront the world economy will be of increasing importance to U.S. citizens. ■

Suggested Reading

Fogel, "Capitalism and Democracy in 2040."

International Monetary Fund, *World Economic Outlook*.

World Bank, *Global Economic Prospects*.

Questions to Consider

1. What factors have helped lead to globalization of the world economy over the last 60 years?

2. How have the broad outlines of the world economy shifted—in terms of economic output, population, and other factors—over the last half century or so?

The U.S. in the World Economy—1960 to 1995

Lecture 2

In the 1970s, it seemed that whatever could go wrong with the U.S. economy did go wrong: deep recessions, double-digit inflation, close to double-digit unemployment, and severe competitive challenges to large domestic industries from foreign producers.

In terms of economic growth, unemployment rates, and inflation, the early and mid-1960s were a golden time. But by the end of the decade, hints of trouble were beginning to be seen. In an average year, the U.S. economy grows about 2.5% after adjusting for inflation. In the mid-1960s, the annual growth rate sometimes exceeded 6%.The unemployment rate was under 4% from 1966–1969, and it hasn't been that low for any full year since then. Inflation was low during most of the 1960s, but toward the end of the decade, it began to heat up a bit and become a concern.

The ratio of accumulated federal debt to GDP began to grow in the 1980s for the first time in decades.

The 1970s was a decade full of bad economic news: deep recessions, inflation, and high unemployment. Productivity growth slowed down, and the U.S. economy suddenly seemed vulnerable to challenges from international trade. If we extend the 1970s just a bit, from December 1969 to November 1982, we can identify four recessions, covering almost one-third of the 13-year period. The unemployment rate hit 7% in the 1970s and rose to almost 10% by 1982 and 1983. The 1970s gave birth to the term "stagflation" to describe a situation in which unemployment and inflation rise at the same time. The 1970s marked a shift in American awareness of economic globalization. Participants in the U.S. economy became aware of the effect of the global economy through OPEC price increases and a continuing rise in imports as a share of GDP. Further, at some point in the early 1970s, the annual rate of productivity growth slowed down. Productivity is defined as the amount of output produced per hour. It is the fundamental factor driving long-run gains in the standard of living.

Several possibly complementary explanations have been proposed for what went wrong in the 1970s. In the late 1960s, Lyndon Johnson increased spending for both guns *and* butter, that is, defense and social programs, to support the Vietnam War and his Great Society programs, including Medicare and Medicaid. This macroeconomic policy pushed the economy into a situation where rising inflation was inevitable, and a crackdown on inflation was bound to bring recession and unemployment. OPEC pushed up oil prices in 1973, just before the deep recession in 1974–1975. Oil prices rose again just before the recessions of 1980 and 1981–1982. The timing seems right for oil prices to be a key contributor to the macroeconomic problems of the 1970s.Monetary policy in the 1950s and 1960s had been run on what has become known as a "stop-go" basis. Under this approach, when inflation rises, it should be stopped with higher interest rates. When unemployment rises, the economy should be pushed forward with lower interest rates. This process led to increasing economic instability and steadily higher rates of inflation. The greater instability could also have affected productivity growth.

The 1980s brought far greater long-run predictability in monetary policy. These years also brought enormous budget deficits and a growing fear of economic globalization. The Federal Reserve, under Chairman Paul Volcker, who took over in 1979, made control of inflation a top priority—even at the expense of causing deep recessions. The ratio of accumulated federal debt to GDP began to grow in the 1980s for the first time in decades. This situation led to concerns over high trade deficits and questions about whether the U.S. economy was on a path of unsustainable deficit-fueled growth. By the 1980s and early 1990s, some Americans saw threats to the U.S. economy from every direction. The economy was threatened by high-wage competitors, such as Japan; middle-wage competitors, such as Mexico; and low-wage competitors, such as China. It was also threatened by centrally planned economies, such as that of Russia, and by oil exporters, such as OPEC. ■

Suggested Reading

Abrams, "How Richard Nixon Pressured Arthur Burns: Evidence from the Nixon Tapes."

Conte and Karr, *An Outline of the U.S. Economy*.

Trehan, "Changing Productivity Trends."

Questions to Consider

1. Why were many onlookers so pessimistic about the U.S. economy in the 1970s? Compared to the 1960s, what went wrong?

2. How were the economic problems of the 1980s the same as or different than the economic problems of the 1970s?

The U.S. Economy Resurgent?
Lecture 3

Starting around 1995, the U.S. economy experienced a productivity resurgence, led first by rapid gains in information and communications technology, then by growth in the use of that information technology across the economy.

After 25 years of slow annual productivity growth, the U.S. economy experienced a resurgence of productivity growth starting around 1995. The resurgence of productivity growth can be traced to a surge of productivity in the industries involved in manufacturing information and communications technology and to the industries that make heavy use of such technology. In the second half of the 1990s, productivity sprinted ahead in the industries producing computers, software, and telecommunications goods. Prices of these goods fell rapidly, which triggered a surge of investment in technology products. This investment explains the rapid economic growth of this period, but the dropoff in investment in mid-2000 led to the recession in 2001.In the first half of the 2000s, productivity increased in the industries using technology products. Many of these industries were service-related, which came as a surprise to economists, because productivity gains in service industries have traditionally been rather low. From the 1970s into the early 1990s, economists often wondered why the widespread computer investment across the economy was having so little effect. Perhaps the most plausible explanation is that for truly revolutionary technological changes, such as the computer and the Internet, several decades may be required for firms and people to reorganize their activities in the fundamental ways that bring large productivity gains.

In the last few decades, other basic macroeconomic indicators have also performed adequately, partly as a result of sensible policy. Inflation has stayed low, not rising above about 4% in any year since the mid-1990s. This outcome is credited to the Federal Reserve's enforcement of policies that simply do not permit inflation to rise. The United States has experienced only one full-fledged recession since 1995—the recession of 2001. However, the economic weakness of late 2007 and early 2008 could become a recession.

Unemployment rates in the 2000s have not risen above 6%, even after the recession in 2001. This outcome reflects the fact that recessions in this period have been mild, short, and rare and that the U.S. labor force is maturing.

The United States had budget surpluses from 1998–2000 but has since returned to budget deficits. The few years of budget surpluses occurred because of an unexpected boost in tax revenues during the boom years of the late 1990s. However, the deficits of the 2000s have not been outsized—they have barely budged the debt-to-GDP ratio. The real fears about budget deficits are in the near future and are closely tied to Social Security and health care costs for retiring baby boomers.

The U.S. workforce will have close to zero growth between 2010 and 2030 as the number of retirees from the baby boom generation counterbalances the entry of new young workers.

Economic growth is determined by several factors, including the addition of physical capital, increases in human capital, and improvements in technology available to workers. The U.S. workforce will have close to zero growth between 2010 and 2030 as the number of retirees from the baby boom generation counterbalances the entry of new young workers. In recent decades, the United States has not invested heavily in physical capital, in part because it hasn't been a high-saving economy. We have relied on a hefty inflow of capital from abroad to finance investment. Further, as the population ages, it seems likely that the United States will remain a low-saving society. We might think of an increase in human capital as a combination of increased education and experience for workers. In the near future, the average level of education may rise modestly, but high retirement levels will remove a great deal of experience from the workforce.

When discussing technology, economists take into account all aspects of the making of a product, including scientific discoveries, mechanical processes, and organizational processes. The U.S. lead in pure scientific knowledge is real, but in economic terms, pure discovery is less important than the ability to find widespread applications of new technology. The U.S. economy also

seems to have a lead in the flexible and widespread application of knowledge, which may be an important advantage for our future.

The world economy is becoming more integrated, and it's important to recognize that the U.S. economy is part of the world economy. Production of goods and services will be ever more split up, with bits and pieces of the process happening in different places. Because the U.S. economy is so huge, large parts of this production will remain in this country. But an open and flexible U.S. economy could also be a key nexus point for the organization and transformation of the resources and capabilities of the world economy. The U.S. economy is currently around 20% of the world economy. It wouldn't be surprising if, by about 2050, the U.S. economy was 10% of the world economy. Interestingly, if this drop in relative size occurs while the United States continues to advance and maintain one of the highest standards of living in the world, it should be viewed as good news. ■

Suggested Reading

Council of Economic Advisers, "Economic Report of the President."

Hill, "The Post-Scientific Society."

Taylor, "Thinking about a 'New Economy.'"

Questions to Consider

1. What is the "new economy" in the United States? Does it seem likely to last?

2. What are the fundamental challenges the U.S. economy will face over the next couple of decades?

Europe—From Catch-Up to Jobless Growth

Lecture 4

After World War II, Europe's economy needed to be rebuilt. During the "catch-up" period, from about 1950 to 1970, European countries made a series of political decisions to integrate their economies more fully.

In the aftermath of World War II, the European economy needed to be rebuilt in physical and institutional terms, but it had the advantage of a fairly high level of human capital and business experience. The destruction of industrial capital during World War II was somewhat less than one might expect. The "strategic" bombing by Allied forces was often not especially accurate. This made it easier to rebuild Europe's capital stock after the war. Europe had high education levels by world standards in 1950. Moreover, Europeans had significant expertise in running businesses. Quite soon, by about 1950, Europe's economy had rebounded back to the prewar level. This implies that Europe experienced zero economic growth during the 1940s, but still, it was a remarkable recovery.

Although Europe added very few jobs in the 1970s and 1980s, its economy continued to grow because of high levels of investment in plant and equipment.

From the early 1950s to the early 1970s, the nations of Western Europe worked under a social compact that helped them in trying to catch up with the U.S. economy. The cutting edge of a modern economy in 1950, as illustrated by U.S. economic leadership, involved high levels of investment in plant and equipment combined with profitable use of technological developments. European countries had strong labor movements, which often had a combative view of corporate profits. Under the social compact, unions kept wage demands reasonable, while employers plowed profits back into investment in technologically advanced plant and equipment—which would

allow economic growth and future wage increases. In the post–World War II years, Europe began creating the economic institutions that would eventually lead to the European single market and the euro in the 1990s. The starting points were the European Coal and Steel Community in 1951 and the Treaties of Rome in 1957, which created the European Economic Community and the European Atomic Energy Community. Part of the reason for establishing these institutions was the hope that economic integration would make a future European war less likely. This strategy worked well. Output per person rose at about 4% per year across Europe in the 1950s and 1960s, faster than in the United States.

A common currency, such as the euro, has advantages and disadvantages.

In the late 1960s, Europe reached the limits of extensive growth and shifted to the alternative, intensive growth. Extensive growth occurs with bigger and better factories and more and more workers. Intensive growth occurs when workers become more productive and involves a shift from manufacturing to services. Europe's social compact began to fray in the late 1960s. Unemployment rates were extremely low. Labor unions began to demand substantially higher pay, along with other benefits, such as shorter hours. Employment growth in many European countries was near zero through the 1970s and 1980s. In comparison, the U.S. economy added large numbers of jobs in the same period. Although Europe added very few jobs in the 1970s and 1980s, its economy continued to grow because of high levels of investment in plant and equipment, which allowed the fixed number of workers to be more productive. The European and U.S. economies grew at about the same rate during this time. However, Europe's economy grew with a fixed number of workers and significantly more capital investment, while the U.S. economy expanded with more workers but not much productivity growth. Unemployment in many European countries climbed steadily through much of the 1970s and 1980s and into the 1990s, reaching persistently high single-digit and even double-digit rates.

Perhaps the major economic policy question across Europe from the 1970s into the 1990s was how to create more jobs. Issues arose on both the supply side and the demand side of the labor market. European welfare and tax policies discouraged working. Generous and open-ended welfare and unemployment benefits meant that the rewards from working were lower. High tax rates also reduced the gains from working. Business regulations discouraged companies from hiring. Some rules required businesses to provide high levels of benefits to workers. Others limited the freedom of businesses to operate.

Europeans seem to have a preference for more leisure than Americans do. One possible reason that Europe created fewer jobs is that once Europeans reached a certain standard of living, they preferred to work fewer hours rather than to earn more income. Many Europeans have 10 weeks a year of vacation, compared to the typical 2–3 weeks in the United States. Together, these factors—reduced incentives for workers to work, reduced incentives for firms to hire, and a greater desire for leisure—resulted in near-zero job growth over several decades across many of Europe's economies. ■

Suggested Reading

Eichengreen, *The European Economy since 1945*.

European Union, "The History of the European Union."

OECD, *The OECD Jobs Study: Facts, Analysis, Strategies*.

Questions to Consider

1. What were the main factors behind Europe's catch-up period of economic growth from about 1950 to 1970?

2. What problems arose with Europe's process of catching up during this same period?

The Single European Market

Lecture 5

In the 1990s, Europe's primary economic problem was high unemployment. But over the next decade, Europe's formerly high levels of productivity growth began to drop off, and the productivity gap with the U.S. economy widened.

The European Union (EU) had 27 members in 2008, including a number of countries from Eastern and Central Europe that had formerly been in the orbit of the Soviet Union. At the start of the 21st century, the EU had 15 members—roughly speaking, the countries of Western Europe, including Germany, France, the United Kingdom, and Italy. But starting in 2004, the EU began to expand to include countries of Eastern and Central Europe, such as Poland and Hungary. Germany's economy is about one-sixth of the entire economy of the EU. The top four economies are about 55% of Europe's economy; the top eight nations are about 70% of Europe's economy. The combined economic size of the EU is just slightly more than the U.S. economy, while the combined population of member countries is about two-thirds more than the U.S. population.

Starting in the mid-1990s, European countries have experimented with different labor market policies and, thus, have experienced different paths for unemployment rates. Some economies of Europe, such as those of Germany and France, continued to experience high unemployment rates right into the 21st century. But other countries, such as the United Kingdom, began to see substantially lower unemployment rates. Netherlands and the United Kingdom led the way in reforming their labor market policies, seeking an approach that continues to protect the unemployed but also provides some incentives for workers to find jobs. Around 1995, the economies of Europe experienced a drop in productivity. Europe's productivity problems seem to stem partly from a lag in application of information technology to such industries as retail trade and financial services.

The Single Market Project aimed to increase productivity by spurring greater competition across the countries of Europe. In the 1980s, there was a widespread sense that despite several decades of working on the "common market," the differences in national regulatory rules across European countries were continuing to block competitive forces and limit trade. The Single Market Project is based on four freedoms: free movement of people, goods, services, and capital. To a large extent, these freedoms have, in fact, been implemented in Europe. The more obvious restrictions on movement of people, goods, and capital were removed by the early 1990s. The single market has already brought modest gains to the economies of Europe, perhaps 1.8% growth in GDP and two to three million additional jobs. But it is unclear that it has raised the long-term rate of productivity growth, which is the real prize. By the late 2000s, The Single Market Project seems to have lost some momentum. This loss can be seen in a number of patterns: low levels of cross-border investment, cross-border trade, and labor mobility.

The combined economic size of the EU is just slightly more than the U.S. economy, while the combined population of member countries is about two-thirds more than the U.S. population.

The "Lisbon agenda" is the name for a set of proposals attempting to make Europe a more competitive and dynamic knowledge-based economy. In 2000, the EU set a policy agenda to correct the slow productivity growth of Europe's economy and the failure to reap the benefits of information technology. In 2007, the Lisbon agenda was focused down to four main tasks. The first objective was to invest in people and modernize labor markets. The second objective was to unlock business potential, especially for small- and medium-sized enterprises. The third objective was to invest in knowledge and innovation. The fourth objective focused on energy and climate change. Increases in education and research do tend to help productivity growth but over a time frame of decades rather than a few months or a year. For a shorter-term payoff, freeing up the businesses of Europe and encouraging more competition seems a better bet.

Many on the European continent used to say that the economic union of Europe was a first step toward creating a United States of Europe. Europe now appears to be headed for a new sort of hybrid, in which the countries of Europe continue as separate entities and retain more power than, say, individual states in our country. However, European countries may give up some power to a central entity and, in that sense, will become less independent and sovereign nations than they used to be. ■

Suggested Reading

Eichengreen, "Old Europe on the Comeback Trail."

Her Majesty's Treasury, *The Single Market: A Vision for the 21st Century*.

Ilzkovitz, et al., "Steps Towards a Deeper Economic Integration: The Internal Market in the 21st Century. A Contribution to the Single Market Review."

Questions to Consider

1. How have Europe's economic priorities in terms of job creation and productivity growth been shifting since the 1990s?

2. How have The Single Market Project and the Lisbon agenda sought to strengthen European economies?

The Rise of the Euro

Lecture 6

The decision of major European economies to give up their own national currencies for the euro is the most significant change in the world monetary system in decades.

Only a decade or two ago, such currencies as the French franc, the Italian lira, and the German mark were the stuff of common conversation. Now, these countries share a common currency, the euro. Choosing a common currency involves tradeoffs. A common currency has two possible advantages. First, it helps tie together an economy by making transactions easier. Imagine that the U.S. economy had 50 different currencies, one for every state. In addition, imagine that the exchange rates for these currencies were perpetually moving. Making business arrangements and traveling would be more complex and costly. A common currency eliminates these issues. Second, a common currency reduces the possibility of political pressure on the central bank to keep interest rates low and to make lots of loans available. Such a policy can stimulate an economy in the short run but leads to inflation and economic destabilization in the long run. A common currency means that monetary policy will be managed from afar with less local political pressure.

A common currency means the loss of an adjustment mechanism. Imagine that one area has a negative economic event, perhaps a high rate of inflation, or low productivity, or a drop in the price for a product from an important industry. A flexible exchange rate offers this region a way of adjusting to that shock. Other methods of adjustment can be economically costly. In effect, a fixed currency requires that two regions have the same monetary policy, regardless of their individual economic situations.

The ability to facilitate transactions outweighs the loss of a flexible exchange rate when the economies of different areas have alternatives for adjusting to a negative economic event in just one of those areas. Typically, three kinds of adjustments are important. With substantial flows of goods and services

between two areas, common prices will tend to prevail across the region, reducing the need for exchange rate adjustment. With diversified economies, the likelihood that a specific problem in one economy will affect only that economy is reduced; again, in this situation, the need for exchange rate adjustments is also reduced. Finally, with mobility of inputs, workers and firms can relocate in response to higher or lower wages.

The path to the euro involved a number of false starts. In 1969, the European Economic Community decided to make economic and monetary union an official goal. But the economic situation in the 1970s was too chaotic to make it work, and the Bretton Woods system of fixed exchange rates collapsed. In 1979, an attempt was made to create a European currency unit, the value of which would be determined by the average value of all European currencies, weighted by the size of the individual countries' economies. This system kept Europe's exchange rates fairly fixed for about 10 years. The euro was first issued in 1999 but initially used only for accounting purposes in banks. In January 2002, the euro moved into popular use as a currency, replacing existing coins and becoming the standard denomination for all prices, wages, and bank accounts. Countries using the euro in 2008 include Spain, Portugal, France, Germany, Italy, Netherlands, Austria, Ireland, Finland, Greece, Malta, and Cyprus.

In its first five to six years, the euro has become the world's second most important currency.

The euro is managed by the European Central Bank, which is constrained by its political structure and by rules about inflation rates and national budget policy. Decisions at the European Central Bank are made by a Governing Council, which includes all 15 governors of the national central banks within the euro area and a six-member Executive Board that manages day-to-day operations. Notice that those representing national governments heavily outnumber those who are centrally appointed. The primary goal of the European Central Bank, according to its establishing treaty, is to ensure a low rate of inflation for the euro. When some member countries wish to use monetary policy for other reasons, this inflation target seems sure to be controversial. All countries belonging to the euro area are required to keep

their ratios of government deficit to GDP below 3% on an annual basis and their ratios of accumulated government debt to GDP below 60%. The economic rationale for this rule is questionable, and it's clear that the rule is broken regularly.

As a new currency, the euro has a fairly brief track record, but some of its effects are becoming clear. One reason for establishing a single currency was to facilitate trade in goods and services, but the increase in trade that can be tied directly to the euro is fairly small—perhaps 10% or so. The use of a single currency was also meant to facilitate cross-border financial investments, an outcome that has occurred quite rapidly. This includes foreign direct investment (in which one firm takes a management interest in a firm in another country) and portfolio investments (a purely financial investment made to diversify a portfolio in another country). The gains in this area are probably quite large—if difficult to measure. One unexpected outcome of the euro is that rates of inflation have differed across countries. Exchange rates were an adjustment mechanism, so that if economic pressures dictated, everything in one economy would change in value relative to another economy. Now, with a common currency, those same economic pressures cause relative changes in value through the domestic inflation rate. The largest gains from the euro have probably gone to the countries with the smallest and poorest economies. They are able to borrow more easily: Joining the ECB eliminates fear that the central bank of a small country might come under political pressure to print money and create inflation. In its first five to six years, the euro has become the world's second most important currency. However, it is still mainly used for international trade and finance either by countries within the euro area or by countries with close historical connections with that area. ■

Suggested Reading

Bertuch-Samuels and Ramlogan, "The Euro: Ever More Global."

Scheller, "The European Central Bank: History, Role and Functions."

Questions to Consider

1. What are the economic conditions under which a single currency will work better over a certain geographic area or worse over a certain geographic area?

2. What are some institutional differences between the European Central Bank and the U.S. Federal Reserve?

3. Do you think the euro will overtake the U.S. dollar as the world's reserve currency?

The Economy of the Soviet Union

Lecture 7

For much of the 20th century, the world economy seemed to be a contest between the Communists of the Soviet Union and the Capitalists of the United States, and many economists and policymakers believed that the Soviet economy might win.

The Union of Soviet Socialist Republics (USSR) was a geographical and geopolitical giant. The old Soviet Union was by far the largest country in the world, covering nearly one-sixth of the Earth's land surface. The Soviet Union had nuclear weapons, leading scientists, Sputnik, Olympic athletes, and great ballet dancers. To many, it represented a sensible alternative to Capitalism. From the 1930s through the 1980s, a number of mainstream economists predicted that the planned Soviet economy was on its way to catching up and overtaking the U.S. economy for world economic leadership.

The Soviet government owned the means of production, set quantities and prices, and produced detailed plans. The government owned and ran essentially all the land, minerals, factories, machinery, and companies in the USSR. A group of bureaucracies, perhaps the best known of which was Gosplan, set up one-year and five-year plans for all enterprises in the Soviet economy. These plans specified in considerable detail what would happen for tens of thousands of producers and 24 million separate products. In the planned economy, money and credit were supposed to play a subsidiary role. There was only one bank. Money and loans were used to facilitate the economic plan. All international trade was also controlled through government planning agencies, such as the Council for Mutual Economic Assistance (COMECON), the members of which included the Soviet Union and some countries in the Soviet bloc. COMECON managed free trade across national borders, but there was little trade outside the Soviet bloc, especially before the 1970s. The bureaucratic obstacles of trying to produce a central economic plan for a large country were substantial. The resulting plans were often inconsistent across different parts of the economy or unrealistic in other ways.

Some salient economic experiences in the early 20th century led to the perception that central economic planning was a reasonable option. The late 19th and early 20th centuries saw the birth of enormous corporations. The trusts that dominated U.S. business appeared at the start of the 20th century, followed by huge manufacturing corporations, such as Ford and DuPont. The Soviet approach was to embrace large organizations for their efficiency and economies of scale but to take control of those organizations away from the rapacious tycoons. During World War I and World War II, the United States and many European governments intervened extensively in their economies. The interventions were designed to help businesses expand production, which appealed both to business and labor interests. The Great Depression of the 1930s proved, to many people, that unfettered Capitalism was prone to disaster and that much more activist government was needed.

From the 1930s through the 1980s, a number of mainstream economists predicted that the planned Soviet economy was on its way to catching up and overtaking the U.S. economy for world economic leadership.

The failure of the Soviet planned economy is clearly visible both in macroeconomic statistics and in its inability to provide incentives to produce goods and services desired by consumers. On the macroeconomic side, the Soviet per capita GDP was similar to that of Brazil or Turkey by about 1990. The Soviet economy grew extremely slowly in the 1970s and 1980s, with a return on investment near zero percent. On the microeconomic side, the failure of central economic planning manifested itself in many ways. The economic planners set quantities to be produced at certain prices, but monitoring quality was far more difficult. As a result, huge quantities of highly substandard goods were produced.Another common result of dysfunctional planning was widespread shortages—and long lines for purchasing goods. Organizations and individuals had no incentive to do things better or differently. Doing something other than what the planners suggested wasn't a good career move. If a new idea succeeded, the planners would likely set higher goals in the future. Workers had no incentive to perform well. Soviet economic planners rarely considered environmental consequences, and those who

complained about environmental problems were often treated harshly. The experience at Chernobyl in 1986 was a consequence of this shortsightedness. The Soviet Union had the ability to mobilize resources for some limited, focused purposes, such as the building of nuclear weapons, but in general, the Soviet model was a Potemkin economy, a good façade erected to mask economic weakness. ■

Suggested Reading

Ericson, "The Classical Soviet-Type Economy: Nature of the System and Implications for Reform."

"A Survey of the Soviet Economy: Gorbachev's Gamble." *The Economist*.

Questions to Consider

1. Discuss some of the ways in which the Soviet model failed to provide the necessary incentives for long-run economic growth.

2. Why do you think the Soviet economic model had such widespread appeal for such a long time?

Transitions from Communism to Markets

Lecture 8

The Soviet Union split into separate nations in the early 1990s, and countries of Eastern and Central Europe that had been in the Soviet orbit established their true independence. The transition away from Communism brought dramatic and rapid increases in political and economic freedom. It also led to hyperinflation, economic inequality, and a deep recession comparable in size to the Great Depression experienced in the United States.

The breakup of the Soviet Union in 1991 was, in a sense, a twofold event. The country that was the USSR broke into successor states, such as the Russian Federation and Ukraine. The Soviet Union also lost its political control over many neighboring countries across Eastern and Central Europe and the Baltic states. The economic transition brought increased political freedom but also economic and social depression. By the rough calculations of various analysts, the degree of economic and political freedom in the Soviet successor states was quite low in the late 1980s. By the mid-1990s, these states enjoyed perhaps two-thirds of the political freedom of the developed, democratic nations of the world.

In many countries, annual inflation rates went over 1,000%.

The nations of the former USSR and Eastern Europe entered a deep depression in the early 1990s. Economic growth started again in Eastern Europe by 1994 and in Russia around 1998 and has increased rapidly since. The economic indicators for these transition economies in the 1990s look almost too horrible to be true. The economic decline of that time was real, but it may well have been overstated. Manufacturers working under the Communist system often over-reported their output in response to political pressure to meet quotas. Moreover, the output that did exist was probably exaggerated in value, because of poor quality. As an alternative to using economic statistics, such as GDP, economists sometimes look at other key indicators, such as electricity use or the share of households owning certain goods. Information here suggests that the standard of living rose somewhat

in countries of the former Soviet Union. In the years immediately after the economic transition, crime increased in Russia, marriage and birthrates declined, and life expectancies for men plummeted. Estimates suggest that the Russian population will decline dramatically in the next 40 years.

The transition to a market-oriented economy was miserable initially, despite the belief that the change should benefit economic growth. A market economy is built on a shared understanding of what it means to search for customers and suppliers, to have budget constraints, and to work hard for wages. In Capitalist economies, these activities and concerns seem natural, but they need to be learned in Russia and Eastern Europe. Russia and many of the transition economies took their first steps toward a freer market by suffering a bout of hyperinflation. In many countries, annual inflation rates went over 1,000% as a consequence of removing price controls in an economic environment in which government budgets and central banks were dumping buying power into the economy. By the mid- to late 1990s, however, most of these nations seemed to have their inflation rates under control.

The privatization process took many forms in Russia and Eastern Europe. Although the privatized firms operated more efficiently, a large group of wealthy and politically connected people ended up owning many of the large firms.

As Communist countries make the transition to a market orientation, they need to create a different kind of government with different taxes and spending priorities. The tax system in the former Soviet Union was based on high payroll taxes for workers and a system of cross-subsidies that enabled the government to set some prices low and others high and pocket the difference. The freeing of the economy brought this tax system crashing down. Installing a broad new tax code and actually collecting the taxes are high priorities. Under the old Communist system, everyone received subsidies. In a market economy, subsidies must be withdrawn from the middle class and the wealthy and focused on the poor and elderly.

Russia and most of the successor states of the Soviet Union had a comparatively rapid transition to a market economy, sometimes called a "big bang." China has had a much more gradual transition, with the state

maintaining a greater role. Some have argued that if Russia and Eastern Europe had undergone a more gradual transition, the results would have been better. But the economic and political situations in China and Russia were very different.

The economies in transition from Soviet Communism are middle-income countries by world standards and have many of the characteristic problems of such countries. Russia and other transition economies are largely upper-middle–income countries, which means that they are comparable to Malaysia, Turkey, South Africa, and a number of countries in Latin America. By that standard, many of the issues in the transition economies look relatively normal. Russia's economy has grown rapidly since the late 1990s, but a substantial part of this growth can be traced to much higher oil prices. By the end of the first decade of the 2000s, Poland and a number of its neighbors have already joined the European Union. These countries are making the adjustment to market-oriented economies that participate fully in globalizing world markets. ■

Suggested Reading

"Briefing: Russia's Economy: Smoke and Mirrors." *The Economist*.

OECD, *OECD Economic Surveys: Russian Federation*.

Shleifer, *A Normal Country: Russia after Communism*.

Shleifer and Triesman, "A Normal Country."

Questions to Consider

1. What happened during the transition from Soviet Communism to a more market-oriented economy, and why did the transition prove so difficult?

2. Looking ahead, what are the main challenges for Russia and for other transition economies, and how are they attempting to face these challenges?

Japan's Economic Miracle
Lecture 9

In the 1980s, many politicians, business leaders, and bestselling books trumpeted the notion that Japan had invented a new business model that relied more on government coordination and less on laissez-faire market economics.

In the 1980s, there was a widespread sense among politicians, business leaders, and the media that Japan had discovered a new business model that would allow it to overtake the U.S. economy. Business and fiction bestsellers praised Japan's economic model in the 1980s and into the 1990s. For many of Japan's cheerleaders, the key aspect to the nation's economic rise was greater government direction, which seemed to work better to develop an economy than free-market forces. This direction took essentially three forms: government-directed Capitalism, managed trade, and patient capital. The Ministry of Economy, Trade and Industry (METI)—formerly the Ministry of International Trade and Industry (MITI)—became a symbol of the Japanese government's management of the economy. "Managed trade" refers to a mixed strategy of blocking imports and offering subsidies to exporting firms, with the result being large trade surpluses. Japan's boosters argued that U.S. firms were forced by stock-market pressures into short-term thinking. In contrast, Japanese firms were financed largely by capital from banks and *keiretsu*, combinations of firms acting together. With this patient capital, Japanese firms could handle short-run losses, if necessary, for the sake of long-term gains.

Japan's economy experienced an extraordinary spurt of growth in the 1960s, and rapid growth continued through the 1970s and into the 1980s. In the late 1980s, Japan's period of rapid economic growth came to a halt. Stock and real estate prices plummeted, economic growth fell to 1% a year or less, and the number of bankruptcies increased, as did unemployment. Japan unsuccessfully took on huge deficits and cut interest rates to stimulate the economy. This experience strongly suggests not only that the hype about Japan's economy was overdone, but also that the fundamental analysis of why Japan had experienced such growth might be misguided.

Japan was astute in its handling of certain economic fundamentals. The nation was an early strong investor in education. Universal compulsory primary education was instituted late in the 19th century, and by the early 20th century, secondary education was widespread in Japan. Japan has traditionally spent a higher share of GDP on education than many other countries. Japan has had far higher rates of savings and investment than the United States in the last few decades. The rate of savings and investment as a share of GDP has been about double that of the U.S. economy. Japan has been well known for many decades, going back to the 19th century, for bringing new technology to its firms. Today, Japanese research and development spending as a share of GDP is similar to that of the United States. Japanese firms are among some of the toughest competitors in the world. They are responsible for a number of innovations in business practices that have been adopted worldwide, including just-in-time inventory management, a philosophy of continuous improvement, and quality circles.

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Japan has been accused of taking unfair advantage of its trading partners in a number of ways but especially by subsidizing key future industries and through barriers to imports. Without question, Japan's bureaucrats often directed industrial subsidies to certain firms and industries, but it's not clear that this policy, taken as a whole, helped Japan's economy. It appears that the bureaucrats more often directed subsidies to low-growth than to high-growth sectors. Japan's economic growth has been linked to unfair trade policies.

Foreign trade is a smaller share of Japan's economy than that of the United States or many European nations. However, Japan's share of world trade has risen as its economy has expanded. Overall, U.S. levels of trade with Japan are considerably lower than one might conclude from media coverage. Japan does have huge trade surpluses, but these can occur for several reasons; the main factor behind trade surpluses in Japan is the country's high savings rate. Japan's consumption of all goods, including imports, is relatively low.

Those in business can tell a thousand stories about unfair trade in Japan and the constraints placed on foreign companies there. Many of the stories are true. Once one gets beyond the anecdotes, however, it is not at all clear that Japan's trade is more unfair than that of other developed economies.

The Japanese government controlled banking and financial institutions quite rigidly in the decades after World War II. Consumers were encouraged to put their money in banks and, indeed, had few other options for investing. Consumer loans were discouraged with tax disincentives. The resulting high savings rate meant that banks had a good deal of capital, much of which they directed to Japanese corporations. The regulations had the overall effect of limiting the return to savers but ensuring a strong flow of capital to firms. ■

Suggested Reading

Lincoln, "International Economic Relations."

Lindsey and Lukas, "Revisiting the 'Revisionists': The Rise and Fall of the Japanese Economic Model."

Metraux and Warner, "The Character and Structure of the Economy."

Questions to Consider

1. How much of the credit for Japan's extraordinary economic growth during the 1960s and 1970s should be attributed to its industrial subsidies and trade policies compared with other possible factors?

2. Does Japan's economic model deserve to be remembered and emulated, at least in certain ways, even though the country's economic growth has slowed dramatically in recent decades?

When Japan's Bubble Economy Burst

Lecture 10

From the early 1990s well into the 21st century, Japan's economy has been mired in slow growth, typically averaging only 1% a year or even less.

Japan's economic boom ended with a financial crisis that began with Japanese worries about a strengthening yen, followed by overreactions by the Bank of Japan and much of the Japanese financial sector, and ending in a debt crisis. Many of Japan's strongest industries are oriented toward exports. In the late 1980s, a weaker U.S. dollar and a stronger Japanese yen had the Japanese government worried. Japan's government reacted to the stronger yen by using monetary policy to reduce interest rates and using fiscal policy to increase government spending. This combination was intended to keep the economy growing and to offset any effect of the stronger yen. Japan's real economy, that sector involved in the production of goods and services, continued its healthy growth in the second half of the 1980s, but in the nation's financial sector, prices of stocks and housing began rocketing upward.

Worries about the strong yen helped set off Japan's financial crisis.

By 1989, the Bank of Japan had come to believe that the increases in asset values were unsustainable and potentially dangerous, and it raised interest rates sharply. Japan's banks had significant holdings in stocks and real estate, and many Japanese firms also owned real estate. When the economic bubble burst and the values of their assets plummeted, these entities suffered huge losses. In the short run, the collapse in asset values discouraged bank lending and business borrowing,

leading to a credit crunch. The result was a severe economic slowdown. When bankrupt banks continue to extend loans to bankrupt firms, it's hard for an economy to move forward. Healthy firms have difficulty competing with the undead but still walking "zombie firms." The result is slow growth and downward pressure on prices. The controlled banking and finance market funneled credit to Japan's corporations and fostered an environment in which neither banks nor borrowers were overly concerned with repayment. This situation set the stage for the long-run sluggishness of Japan's economy from 1990 into the late 2000s.

With Japan's low birthrates, its population has peaked and, in fact, started to decline.

For Japan's economy to move forward, it needed to clean up the banking sector and encourage deregulation and competition. The Bank of Japan held the "call rate" (a key interest rate comparable to the federal funds rate of the U.S. Federal Reserve) to near zero percent in 2001. Japan's government has run enormous budget deficits for many years in an attempt to stimulate its economy through public works programs. The result has been an extremely large accumulation of public debt. Deregulation is one possible solution to economic problems. In this arena, Japan is often said to have a two-tier economy. One tier includes the world-famous Japanese firms that compete hard in world markets, producing such goods as cars and electronics. The other tier includes highly protected and regulated industries that do not compete in world markets, are often inefficient, and weigh down the economy.

The bad debts incurred by Japanese firms to banks in the 1990s have been slowly worked down in the 2000s. This process has shaken up patterns of patient capital and labor market arrangements in Japan. In the second half of the 2000s, Japan's economy seems to be regaining some positive if modest momentum. On the surface, Japan's economic future may look bleak, but it also has fundamental strengths and appears to be slowly sorting out its problems.

Japan retains the foundation for a healthy, high-income economy; it has skilled workers, high investment levels, and good access to research and development, all operating in an economy with a market-oriented framework and well-developed financial and legal systems.

With Japan's low birthrates, its population has peaked and, in fact, started to decline. Combined with longer life expectancies, this decline means that Japan's economy will need to deal with a situation of fewer workers supporting more retirees.

The targets for Japan's future economic growth are all the industries that have not yet taken the big leap to higher productivity. Japan needs to improve productivity from such industries as retail sales, food processing, financial transactions, and electricity production. Japan also needs to push for new products instead of making incremental improvements to existing products. ■

Suggested Reading

Asher, "What Became of the Japanese 'Miracle?' Economic Development in Japan: Economic Myths Explained."

Hoshi and Kashyap, "Japan's Financial Crisis and Economic Stagnation."

Porter and Sakakibara, "Competition in Japan."

"The Sun Also Rises." *The Economist*.

Questions to Consider

1. What was Japan's bubble economy, and why has it proven so hard to restart economic growth?

2. Is Japan's economy now on the verge of, if not the rapid growth patterns of the 1960s and 1970s, at least a return to respectable, modest patterns of growth?

Government versus Market in East Asia
Lecture 11

The East Asian "tigers" include the Republic of Korea, Taiwan, Indonesia, Malaysia, and Thailand and the city-states of Hong Kong and Singapore.

Seven economies of East Asia, not including China, offer an incredible economic success story that may hold lessons for raising the standard of living for the poorest people in the world. The East Asian "tigers" are Hong Kong, the Republic of Korea, Singapore, Taiwan, Indonesia, Malaysia, and Thailand. These countries vary wildly in their basic characteristics. Hong Kong and Singapore are small city-states. Indonesia is one of the most populous countries in the world. Hong Kong, Singapore, and Taiwan are close to the United States in terms of standard of living, but others are still poor.

The tigers share extraordinary growth performance. The economies of these nations grew at rates of 7 to 10% from the 1970s into the 1990s. They suffered a major economic setback during an international financial crisis in 1997–1998. Since then, they have resumed fairly rapid growth, but not as dynamic as earlier.

The East Asian experience has become a battleground for those who both support and oppose free markets. A major study by the World Bank in the early 1990s found that the primary cause for East Asia's rapid growth was stable fundamentals. Occasionally, government interventions in the market were helpful.

Some building blocks of economic growth include macroeconomic stability, education, high rates of saving and investment, and market-based incentives. From the 1970s up through the early 1990s, the East Asian tigers kept inflation, as well as government and foreign borrowing, under moderate control. These economies have invested heavily in education, building up from universal primary education through higher levels of education. Saving and investment in these economies have typically been 30 to 35% of GDP,

double the rates prevailing in much of the rest of the world. In general, these countries experienced extensive competition in many domestic markets, as well as competition from international trade. They also had a substantial number of interventions in their markets, but these were small when compared with the economies of Latin America. The East Asian economies were very open to technology from abroad. They have been willing to import machinery, license technology, and accept direct foreign investment.

A major study by the World Bank in the early 1990s found that the primary cause for East Asia's rapid growth was stable fundamentals.

Governments across East Asia have also used interventionist economic policies in an attempt to stimulate their economies, with mixed results. In many cases, these countries tried to designate specific industries as "strategic" and to use licenses, fees, and subsidies to support those industries. This system benefited the industry receiving the subsidy, but the subsidies didn't improve productivity much. Up until the early 1990s, the governments of East Asia's tigers typically regulated the interest rates banks could charge to borrowers and the rates they could pay to lenders; governments also prevented easy entry of new banks into the financial sector. These policies made existing banks flush with money, which they could then lend to corporations. Many East Asian governments encouraged exports, often using special rules or contests. For example, a firm with an export order of a certain amount or a firm that has steadily expanded its exports over time might receive cheaper credit.

The evidence from the golden period of growth for the East Asian tigers suggests that the fundamentals are far more important than government industrial and trade policy. Improving the fundamentals of growth and bypassing government intervention would have made relatively little difference in the economic growth experienced by the East Asian tigers. But intervening in the market without improving the fundamentals would have led to little growth. Governments and businesses have different mindsets that may explain why the fundamentals are more important. Governments have the power to do things they need to, such as raising taxes. Success in business,

however, depends on the ability to make a product that customers will actually buy. Businesses measure output in terms of profit, but governments measure output by other means and do not have to face the profit test. ■

Suggested Reading

World Bank, *The East Asian Miracle*. Particularly recommended is the chapter entitled "Overview: The Making of a Miracle," pp. 1–26.

Questions to Consider

1. What are the arguments for how fundamental economic factors encouraged growth for the East Asian tigers, and what are the arguments for how government industrial policy encouraged their growth?

2. What recommendations would you draw from the experience of the East Asian tigers for low-income countries?

East Asia's Tigers—Restore the Roar?

Lecture 12

In 1997–1998, the East Asian tigers went through a financial crisis and a deep recession, largely attributable to international capital flows first rushing into these economies, then rushing out.

The East Asian financial crisis of 1997–1998 came as a shock to many economists and policymakers, because the standard explanations for such financial crises didn't seem to apply. The economic implosion of the East Asian tigers in 1997 and 1998 was brought on by a "sudden stop" in the inflows of international financial capital. International lending involves buying and selling currencies. Exchange rate movements are a potential risk in international lending. At the same time, international financial investments put pressure on exchange rates to change. Most countries in the world borrow and repay money in U.S. dollars (or sometimes in euros or yen). Thus, a bank in a given country borrows in dollars, exchanges funds for the local currency in the foreign exchange market, lends in the local currency, gets repaid in the local currency, switches from the local currency back to U.S. dollars, and repays the original loan. If the exchange rate changes, then the bank may be unable to repay its foreign borrowing. In general, foreign investment flowing into an economy means that there is a higher demand for that currency, which keeps the exchange rate strong. Conversely, foreign investment flowing out of an economy means a lesser demand for that currency, weakening the exchange rate. Many East Asian currencies, however, were tied to the U.S. dollar, at least in a loose way, by their governments. The resulting fixed exchange rates reduced the risk for foreign investors, who didn't have to worry about exchange rate movement.

The story of the East Asian crisis unfolded with a strong inflow of capital in the form of U.S. dollars; when the exchange rate crashed, those debts could not be repaid. When the foreign investment flowed out, the result was widespread bankruptcy of the banking systems and a depression-like economic slowdown. When the economies of East Asia were "discovered" by foreign investors in the first half of the 1990s, hundreds of billions of dollars flowed into these economies. Fixing East Asia's exchange

rates to the U.S. dollar helped to encourage the inflow of financial capital in the early 1990s. But when the value of the U.S. dollar went up in the mid-1990s, East Asia saw its exports fall. When foreign investors started examining their loans more closely, they saw all sorts of potential problems with these loans—and ran for the exits. Stock markets and exchange rates across East Asia fell sharply when foreign investors pulled their money out of these economies in the second half of 1997. The region experienced very un-tiger-like zero and negative economic growth rates for the next couple of years. The economic turmoil brought political change, including change at the top levels of government in some of these countries. The economies rebounded slowly, only returning to their pre-1997 levels of growth three to five years later.

The economic turmoil brought political change, including change at the top levels of government in some of these countries.

Several possibilities exist for preventing a repeat crash. Countries could opt to cut off the flow of international financial capital, but countries that want to be well-integrated into the world economy will have difficulty shutting down international capital flows. Several policies can reduce the risks of a sudden stop in financial capital: flexible exchange rates, sensible banking regulation, and large foreign exchange reserves. If exchange rates are known in advance to be flexible, then foreign investors and financial institutions take steps to protect themselves against the risk that the exchange rates will shift. When banks are better regulated, they are less likely to make numerous bad loans or find themselves in a position where they are unprotected against the risks of shifting exchange rates. Across the region, the number of nonperforming bank loans was significantly lower by the mid-2000s, and the extent to which corporations relied on debt was also reduced. Foreign exchange reserves help to prevent panicky capital flight, because when investors know that the government is ready to purchase its currency if necessary, they are less likely to flee the country.

The transition from middle- to high-income status may be possible for East Asian countries if they can find a way to take advantage of their proximity to China and India. The change from low-income to middle-income status

requires basic levels of education and strong investment in physical capital. The transition to high-income status requires higher levels of education and a position of global technological leadership in some areas. China and India are two of the largest and fastest-growing economies in the world in the second half of the 2000s. This is bad news for countries competing with them directly but good news for those countries that can find ways to complement their growth. High levels of investment in physical capital helped to drive the economic growth of the East Asian tigers in the 1970s and 1980s; however, those levels of investment have declined somewhat in the last decade. South Korea and Taiwan have continued investing in human capital skills and technological leadership and seem to be poised to continue steady growth. Indonesia, Malaysia, and Thailand, the poorer, larger nations in this group, have had shortages of skilled workers and don't seem to be investing enough in skills to improve their workforce. ■

Suggested Reading

"Briefing: Business in South-East Asia: The Tigers That Lost Their Roar." *The Economist*.

Burton and Zanello, "Asia Ten Years After."

World Bank, "East Asia and Pacific Update: 10 Years after the Crisis."

Questions to Consider

1. Discuss the steps by which a "sudden stop" in international financial investment led to the 1997–1998 economic crisis in East Asia.

2. What policy steps can help to reduce the risk that a sudden stop will bring on a financial and economic crisis?

3. What are the future growth prospects for East Asia?

China's Gradualist Economic Reforms
Lecture 13

In the late 1970s, China began a gradualist approach to economic reform.

Mao Zedong proclaimed a Great Leap Forward for China in the late 1950s, but in reality, China's economy was stagnant for several decades before it started market-oriented economic reforms in the late 1970s. From the 1950s to the 1970s, under the leadership of Mao Zedong, China was embroiled in a series of chaotic initiatives, including the Great Leap Forward and the Cultural Revolution. These policies led to stagnation and widespread poverty at best and mass starvation at worst. During the Great Leap Forward, China's stated goal was to shift from an agricultural society to an industrial one. But this goal was often pursued in harsh and even nonsensical ways; for example, forcibly shifting farmers away from their land led to mass starvation in the early 1960s. China's economy established one new pattern during this time that was economically helpful: dramatically increasing its rate of investment. After the Sino-Soviet split in 1960, however, little technical or industrial expertise was available to make this investment productive. China's Cultural Revolution in the second half of the 1960s spawned extreme anti-foreign and anti-intellectual sentiment. Both domestic education and expertise and foreign expertise were often under violent assault.

In the late 1970s, China began a series of economic reforms that have led to spectacular economic growth and marked increases in the standard of living. If this pattern of growth continues, China's economy will be the largest in the world in roughly a decade. China's economy has grown about 9% a year from the reforms in the late 1970s up to the late 2000s. Population over this time has increased by about 30%. Thus, the average person in China has seen a more than 20-fold increase in the standard of living over the last three decades. Poverty rates have plummeted, and ownership of consumer goods has skyrocketed.

China's economic changes in the late 1970s were sometimes described in overblown terms, but in retrospect, the changes were modest and gradual, especially when compared to the rapid sweeping away of the central planning apparatus in such economies as Russia or India. China's economic reforms were undertaken by a Communist Party securely in power. The changes did not include privatizing all state-run companies and involved relatively modest reductions in price controls. The approach was one of gradualism, not wide-ranging reform. Until the late 1970s, China's farmers worked in collectives. They had little incentive to produce more, and they didn't.

China's economy has grown about 9% a year from the reforms in the late 1970s up to the late 2000s. Population over this time has increased by about 30%. Thus, the average person in China has seen a more than 20-fold increase in the standard of living over the last three decades.

In 1978, the central government allowed farmers increased freedom as long as they met their basic agricultural quotas. Some sought other sources of income and were able to buy their share of production from other farmers. The result was a boom in farm output, markets in agricultural products, and farmers leaving the land to seek jobs in other sectors. The formerly rural workforce moved to work in township and village enterprises, typically small- or medium-sized firms, often engaged in light manufacturing of consumer goods, and owned by collectives or local governments. These enterprises grew explosively, leading the path away from state-owned production. In the old Communist system, foreign trade and investment were discouraged. In recent years, however, thousands of companies have been allowed to import and export, and foreign investors have been welcomed. China's early economic reforms generated additional growth for fundamentally different reasons from the growth generated by Japan or the East Asian tigers. China's early surge of growth wasn't a result of increases in education, levels of investment, or government intervention but about stepping aside to allow economic progress.

Another wave of economic reforms followed in the later part of the 1980s and into the 1990s, including the phasing out of price controls and a reduction in the relative importance of state-owned companies. Price controls were phased out in China's economy in a process that started early in the reforms but picked up considerable speed by the late 1980s and the first half of the 1990s. By 2003, most prices for producers, for retail sales, and in agriculture were set by markets rather than by government. There was considerable concern over selling or privatizing state-owned enterprises. Over time, the government allowed many of these firms to keep some of their profits and begin to operate partly in the market economy. Under this pressure, many of the state-owned firms have made progress toward a market orientation.

Some countries wonder if China's economic approach might work for them. However, China's distinctive position may be difficult for other countries to copy. China's neighbors, Taiwan and Hong Kong, have close ties to China and to the rest of the world, thus easing China's integration into the world economy. China's government before the reforms was repressive in many ways, but its interference in the economy was fairly limited. Compared to the Soviet economy, for example, it had less involvement in setting prices. China's Communist Party has never seriously had to fear losing power during the economic reforms. China's economy had been so strangled by political control and the people were so poor that reform was ardently welcomed. ■

Suggested Reading

OECD, *China in the World Economy: The Domestic Policy Challenges*.

Perkins, "Completing China's Move to the Market."

———, "History, Politics, and the Sources of Economic Growth: China and the East Asian Way."

Questions to Consider

1. What was China's economy like before the economic reforms of 1978?

2. What is meant by saying that China has practiced "gradualist" economic reform?

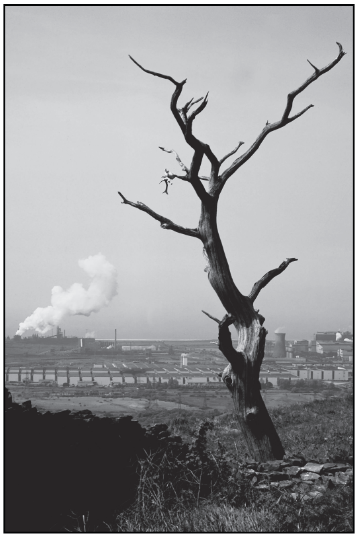
3. Where might it be easier or harder to copy China's path to economic reform?

China's Challenges for Continued Growth

Lecture 14

The emphasis in China's economy has shifted to heavy industry, using increased amounts of energy and natural resources. This approach leads to continued high economic growth but also creates high levels of pollution.

China's growth in the 2000s has been driven by a combination of investment in physical capital and in exports, with a high level of national savings underpinning both factors. China's gross national saving rate—which combines all saving by households, firms, and government—was already at about 30% of GDP at the start of the reform period in the early 1980s. The saving rate climbed above 40% of GDP in the 1990s and touched an astonishing 50% of GDP in 2005. An economy with an extremely high saving rate is swimming in investment capital. A good portion of the savings ends up in state-owned or state-controlled banks, which in turn, lend it to industry. In the 2000s, China has seen a surge in growth of heavy industries, which are highly capital-intensive and often use large amounts of raw materials and energy.



China's successful industrial growth has also led to high levels of air pollution.

A high-investment economy has certain consequences. One way of measuring GDP, or economic output, is to divide it into five parts: consumption, investment, government spending, exports, and imports. In China, with investment and exports so high, consumption has tended to be quite low as a share of the economy. The rapid growth of heavy manufacturing in China has led to much

higher demand for energy and for other commodities, such as metals and food. In fact, China's demand for commodities has spurred a global rise in prices for these commodities in the late 2000s. As China expands its heavy industry at a rapid pace, it creates considerable air and water pollution. China's laws to moderate pollution have tightened and the available technologies to reduce pollution have expanded, but the sheer growth of industry continues to create environmental problems. When consumers don't buy a high proportion of a country's output, then a large share of that output ends up being sold in other countries. China didn't have especially large trade surpluses in most of the 1980s and 1990s, but growth in exports and China's trade surplus have been important factors in its economy in the first decade of the 2000s. With the Chinese economy running huge trade surpluses, much of the incoming foreign currency has gone into building up enormous foreign exchange reserves—totaling over $1 trillion in the late 2000s.

The Chinese government holds foreign exchange reserves to keep the value of the yuan low.

China needs a broad shift in its economy, away from the heavy-investment, heavy-industry, export orientation and toward a greater emphasis on domestic consumption and provision of services. In academic writing about China, this shift is called "rebalancing." China can't sustain its current pattern forever: that is, extremely high rates of national saving, much of which ends up being held by the government as part of an extraordinarily large stash of dollar-denominated foreign exchange reserves. One likely approach is for China to increase spending on consumption-type items, such as education, health care, and social security for the elderly. Given the low budget deficits and the high level of national saving, it would make economic sense to use moderate deficit spending for this purpose. This kind of social spending increases consumption in two ways. The government is spending money directly.

People feel less need to save because some level of government support is available. If the Chinese central bank stops accumulating high reserves and allows the value of the yuan to rise, exports will tend to decrease and imports will be encouraged. Overall, this change would foster the necessary rebalancing. China has had a pattern of depositing its huge savings in state-owned banks, then loaning money to large state-owned companies. In the 1990s, it was a common fear that many of these loans would never be repaid and that the state-owned banks were facing huge losses. China has made progress in reducing these problems over time, but further steps are needed.

Much of China's economic growth has been based on cheap and plentiful labor, combined with high levels of investment in physical capital. But is China's era of cheap labor coming to an end? The general pattern of labor movement in China since the economic reforms has been from the western and northern areas of the country (more rural and less developed) toward the coastal and southern parts of the country (urban areas). But some areas are now reporting unfilled jobs and rising wages. The migration from rural to urban areas will continue for a few more years, but the size of China's workforce will be reduced over time by demographic trends and increased levels of higher education.

If the U.S. economy grows at 3% per year and China's economy grows at 9% per year, then China will have the world's largest economy in roughly 15 years.

In 2005, 45% of total Chinese employment was still in agriculture. Given past and future trends in agricultural output, perhaps 150 million or more workers can still be expected to migrate from rural areas to cities. China's great migration from the farms isn't over yet but is slowly drawing to a close. Education in upper-secondary and college-level institutions has been low in China. But as it rises, fewer people in the 15- to 24-year-old age group will be available as low-skilled workers. China's birthrates dropped significantly in the 1970s, partially as a result of the one-child policy adopted by the government at that time. The lower birthrates mean that China's working-age population will start to shrink around 2010. In the long-run, maintaining perpetually

low wages is not the path to economic success. China has not reached the end of its low-wage era yet, but as education levels increase and the size of the labor force levels off (perhaps even declines), China's wages should start to rise.

In early 2008, the U.S. economy is the largest in the world, and China's economy is the second largest. If the U.S. economy grows at 3% per year and China's economy grows at 9% per year, then China will have the world's largest economy in roughly 15 years. This growth may take slightly longer—sustaining 9% annual growth rates for several decades is not a sure thing—but it seems likely that China's economy will displace that of the United States some time in the next two to three decades. ■

Suggested Reading

Lardy, "China: Rebalancing Economic Growth."

OECD, *OECD Economic Surveys: China*.

Questions to Consider

1. What are some of the problems with China's pattern of economic growth in the 21st century?

2. Is China likely to suffer a labor shortage that will hurt its economic growth?

India and the License Raj

Lecture 15

The economy of India after independence was heavily influenced by a belief in Socialism, filtered to some extent through Gandhi's beliefs about self-sufficient village communities. The result was an economy smothered to an almost unbelievable degree by government licensing requirements.

Our story begins with India's independence from Britain in 1947 and Mahatma Gandhi. Gandhi's economic beliefs were an extension of his moral beliefs about nonviolence, broadly understood. He emphasized self-sufficient village communities in which people would contribute to the common good out of a sense of duty, working primarily with their hands. He tended to view the realities of using machinery or engaging in large-scale production as acts of violence. India's first prime minister, Jawaharlal Nehru, was a great admirer of the Soviet economy and Socialism. He believed that state ownership was fundamentally fairer than private ownership and that centralized economic planning would work far better than private markets. He thus set up a large public sector and many restraints on private business. Chakravarthi Rajagopalachari, another prominent Indian leader at the time of independence, coined the term the "license raj" in the early 1960s. "Raj" (meaning "reign") was the name given to British colonial rule over India from 1858 to 1947. The license raj conveyed the idea that India had thrown off British rule but was now under the rule of copious intrusive rules and regulations.

Following independence, India adopted a "mixed economy" with strict regulations. After 150 years of feeling exploited by trade with Britain, India reacted with an inward-looking philosophy of self-sufficiency that discouraged foreign trade. Policies included imposing high tariffs on imports and maintaining a strong currency to discourage exports. India largely withdrew from foreign markets.

The result was sometimes called a "mixed economy" or a "Socialist economy." Whatever the name, it was heavily planned, with a combination

of government monopolies and strict licensing for all key decisions of private firms. The overall justification for this system was that as a poor country, India needed to focus its resources on what was important. In the 1950s, India decided that 17 key industries would be reserved for the public sector. In the 1960s, another batch of industries was nationalized. By the 1980s, state-run industries produced about one-quarter of India's GDP and consumed much more of its investment capital. Starting in the 1950s, the government created a number of licensing rules for private firms, including requirements that a government license be obtained for setting up or expanding a unit of production or changing what was produced. These licenses were typically reviewed for months or years before decisions were made.

After 150 years of feeling exploited by trade with Britain, India reacted with an inward-looking philosophy of self-sufficiency that discouraged foreign trade.

India's distrust of market forces was evident in the passage of 50 major laws concerning labor markets. These laws were so stringent, requiring extensive benefits and preventing firing for almost any reason, that they deeply inhibited the growth of industry in India. Keep in mind that India is a diverse country, with a huge population and a number of linguistic and religious divisions. To some extent, the many interventions in the economy were aimed at maintaining democracy across India, avoiding feelings of grievance, and knitting the country together.

India's economy grew moderately from the 1950s up into the 1980s, averaging about 3.5% per year. But changing domestic and international conditions, combined with the persistence of widespread poverty and an impending fiscal crisis, all led to pressures for change. Well into the 1970s and even the early 1980s, the West viewed India as a poor but basically admirable economy, not slavishly devoted to the market, forging its own way. With the "green revolution" and various technological accomplishments, the sense was that India's growth rate should be counted as a genuine success.

When Indira Gandhi was reelected in 1980, she almost completely changed her economic orientation. In the 1970s, she had been an avowed Socialist. In

the early 1980s, she aligned herself with the private sector and allowed many licenses to be issued for expanding and altering production. India's economy grew more quickly as a result, for a time.

With the collapse of the Soviet Union and the rise of Capitalist East Asian economies, the Socialist model of India began to look dated. By the 1980s, the Soviet economic model was clearly not working well and had become less attractive. Compared with the vivid economic success stories of Japan, China, and East Asia, India's 3.5% growth rates began to look tepid.

The fundamental justification for India's economic policies had long been that they were necessary to help the poor. But by 1990, although some progress had been made, poverty remained a significant problem in India.

India's government ran large budget deficits through the 1980s, typically about 9% of GDP each year. Inflation rose, and it became clear that India was in danger of defaulting on its debts. In 1991, when Narasimha Rao became prime minister, he took the government financial crisis as justification for starting to dismantle the license raj. ■

Suggested Reading

Crook, "India's Economy."

Das, *India Unbound: A Personal Account of a Social and Economic Revolution from Independence to the Global Information Age.*

Questions to Consider

1. In what ways did India's legacy of British colonialism lead to economic policies that hindered growth?

2. What is the "license raj," and why did it restrain economic growth?

3. What developments in the world economy made India's economic model begin to look less politically acceptable in the 1970s and 1980s?

India's Turn toward Market Economics

Lecture 16

India began a series of economic reforms in 1991, taking large steps toward reducing the license raj and allowing more competition.

When Narasimha Rao became prime minister of India in 1991, he launched a profound change in economic policy that caused growth in India first to rise, then to take off. Rao was expected to be a safe, stopgap choice at a time when India's economy was under severe strain. Rao's reforms, however, involved reversing many elements of India's earlier economic philosophy and heading toward fewer restrictions on trade, less licensing, increased foreign investment, and greater domestic competition in many industries.

The economic reforms of 1991 were followed by a modest rise in growth rates compared to the 1980s, but by the mid-2000s, growth was considerably faster. The economic reforms of 1991 were followed by economic growth that was higher than that in the 1950s to the 1970s but only a little higher than the 1980s. In addition, the East Asian financial crises of 1997–1998 slowed down economies all around the region. A decade after the reforms, it was clear that they hadn't brought on disaster, but some questioned whether they had done much good either. India's economic growth surged faster, hitting 8 to 9% per year in the mid- to late 2000s. Poverty rates plummeted. Although no one argued for a return to the license raj, controversy continued over whether the benefits of growth were distributed equally.

India has made great strides in freeing up its economy and realizing benefits of faster growth, but a number of steps remain if growth is to be continuing and widespread. India's labor laws, for example, remain restrictive. These laws protect a limited number of workers who have formal employment contracts with large companies, but they sharply limit job creation and create

inefficiency in the rest of the labor force. Although the license raj is mostly dead, India continues to have a large number of rules and regulations that can make it a difficult place to start a business. India also continues to have relatively low rates of education, especially for the poor. The government spends relatively little on education, and many parents—even low-income parents—have responded by paying to have their children attend private schools. An educated workforce is an essential building block to sustaining rapid growth in the future. India's infrastructure has failed to keep up with its growth. This is true in a number of areas, including electricity, transportation, and water. If the government cannot improve the infrastructure, it may need to coordinate private efforts to do so. India has been running chronic budget deficits, incurring debt but not building infrastructure or helping the poor. On the spending side, it needs to curtail widespread subsidies and, instead, target spending to build long-term capital and assist the poor. On the tax side, India must take steps to institute a more broad-based set of taxes.

India's infrastructure has failed to keep up with its growth.

If India's growth is to be economically and politically sustainable, it will need to demonstrate that its effects are reaching most citizens, not just a few. In the United States, we hear a lot about high-tech enclaves in India, which are certainly growing and flourishing. But India's population is still mostly rural, and it continues to include several hundred million people in deepest poverty. Nobel laureate economist Amartya Sen once remarked that India would not flourish if it was "half California, half sub-Saharan Africa." Economic growth is often unbalanced—that is, it happens predominantly in certain industries or regions rather than everywhere at once. But a range of government policies concerning education, health, infrastructure, and internal markets can help to spread the benefits of economic growth to some degree. Without such policies, India's growth may not be either politically or economically sustainable. ■

Suggested Reading

Das, *India Unbound: A Personal Account of a Social and Economic Revolution from Independence to the Global Information Age*.

Meredith, “The Elephant and the Dragon.”

Varma, “Profit’s No Longer a Dirty Word: The Transformation of India.”

World Bank, “India: Inclusive Growth and Service Delivery: Building on India’s Success—Development Policy Review.”

Questions to Consider

1. What is the substance of the economic reforms that India carried out in the early 1990s?

2. How persuasive is the argument that India’s reforms have led to additional economic growth?

3. What are some of the main economic challenges India faces in the early decades of the 21st century?

Inherited Institutions in the Middle East

Lecture 17

About eight centuries ago, the Middle East was probably the most scientifically advanced and economically powerful region in the world.

The total population of the Middle East is similar in size to that of the United States, but Middle Eastern economies are much smaller than the U.S. economy. International organizations, such as the World Bank and the International Monetary Fund, usually define the Middle East as stretching from North Africa and across the Red Sea to the Arabian Peninsula. The total population of the Middle East region is somewhat greater than that of the United States at roughly 315 million. The GDP of the United States is about $12 trillion, but in the Middle East, it is only about $2 trillion. Thus, the per capita GDP for the region is about one-sixth of the U.S. level.

Economies of the countries of the Middle East are small relative to the U.S. economy—comparable in size to the economies of medium or small U.S cities. The biggest economy in the Middle East—that of Saudi Arabia—is roughly equal in size to the economy of the Boston metropolitan area. The economy of Egypt, the most populous country in the Middle East, is similar in size to the metropolitan area of San Diego, California.

The biggest economy in the Middle East—that of Saudi Arabia—is roughly equal in size to the economy of the Boston metropolitan area.

Connections from culture to economics have often been made too casually, but it seems true that Islamic countries have lower per capita incomes after adjusting for other potentially relevant factors. From the standpoint of an economist, cultural or religious traditions often seem to change when economic incentives change. For example, Eastern religions were once thought to be antithetical to Capitalism because in these religions, the emphasis is on the community rather than the individual. The experience of economic growth in Japan, China, and India, however, has shown that financial incentives may

have more influence on behavior than cultural traditions. Most countries across the Middle East have populations that are at least 90% Muslim. However, only about 20% of the Muslims in the world live in the Middle East. Further, modern Islam has many varieties. Using data from countries around the world, every 10 percentage-point increase in a country's share of Islamic population means, on average, a 4% fall in per capita GDP. When adjusting for other factors, the specific numbers change, but the general pattern continues to hold.

The rules or customs in the Middle Eastern versions of Islam may have made the people less well suited to compete in the modern economy. A claim is often made that Islam prohibits the payment of interest. This claim is doctrinally and historically weak, but it suggests some hostility to the financial sector more broadly. Traditional Islamic law limited the size of partnerships and the ability to pass wealth and businesses through time by inheritance. These factors probably limited the development of large-scale economic organizations in the Middle East. In traditional Islam, public assets were often provided by a *waqf*, or "Islamic trust." This organizational system offered a way around inheritance laws and enabled the construction of hospitals, mosques, orphanages, and other public works, but it was also inflexible over time.

Women in the Middle East have relatively low levels of education and health care. They often lack political equality, as well. These patterns affect economic growth in a number of ways, including reduced output from women workers and lower levels of education for children.

The Middle East was the world leader in science and technology around the 12th and 13th centuries, but it has lost that leadership position. A hesitant attitude toward science and technology persisted well into the 20th century.

Part of the reason for the slow evolution of Islamic financial institutions may be the greater emphasis on Communalism in the Middle East compared with a greater emphasis on Individualism in Western Europe. ■

Suggested Reading

Kuran, *Islam and Mammon: The Economic Predicaments of Islamism*.

———, "Why the Middle East Is Economically Underdeveloped: Historical Mechanisms of Institutional Stagnation."

United Nations Development Programme, *Arab Human Development Report 2002: Creating Opportunities for Future Generations*.

Questions to Consider

1. What are some of the potential difficulties in attempting to link culture or religion and economic outcomes? In what situations might these problems be more or less severe?

2. What are some of the deep-rooted Middle Eastern economic institutions that may have hindered the economic development of the region over the last half millennium?

The Curse of Oil Wealth in the Middle East

Lecture 18

It may seem obvious that oil resources should increase economic prosperity, but we don't see this outcome in the Middle East.

Despite their position as major oil exporters, many countries across the Middle East have experienced levels of per capita GDP that are generally flat or even declining in recent decades. Large-population countries in the Middle East, such as Algeria, Egypt, Iran, Iraq, and others, have seen either small increases or outright decreases in living standards over the last few decades. On other measures of a healthy economy, including health care and education, these economies have not performed well either. Life expectancy and infant mortality are two common proxies for the overall level of health in a given country. Especially in infant mortality levels, countries of the Middle East are far behind such high-income countries as the United States.Illiteracy rates in the Middle East are worse than the average for other developing countries around the world.

Other factors underlie this poor economic performance. Physical infrastructure includes provision of water, phone lines, roads, and so on. Countries of the Middle East have not performed especially well on these measures. Economies of the Middle East have had widespread price controls for many decades. Other than oil, international trade involving the Middle Eastern region is quite low, both within the region and with other regions. Banking systems are underdeveloped; thus, getting loans is difficult for both ordinary people and small businesses. Governments in this region have often run large budget deficits relative to the size of their economies. Countries of this region have a desert climate, which means that they tend to lack arable land. Birthrates have declined in much of the world but have done so more slowly in the Middle East. As a result, many countries in the region have large shares of their populations in relatively young age brackets but low job growth. Widespread unemployment among young men is often a recipe for social turmoil.

It may seem obvious that oil resources should increase economic prosperity, but we don't see this outcome in the Middle East. Economists have developed theories to explain why oil resources do not necessarily lead to sustained economic growth. Given the importance of oil in the world economy and the size of oil exports from the Middle East, surely the economic performance of the region is underwhelming. Across the world, oil exports do not seem to result in economic growth, nor do they bring about improvements in social or political indicators. "Dutch disease" is the name that economists give to the situation in which discovery of a natural resource weakens other aspects of the economy. In particular, it can lead to inflation, a strong currency that discourages other exports, diversion of investment capital from other parts of the economy, and lower levels of political responsiveness.

Large-population countries in the Middle East, such as Algeria, Egypt, Iran, Iraq, and others, have seen either small increases or outright decreases in living standards over the last few decades.

Well-run government institutions can inoculate their countries against Dutch disease by avoiding government debt, spreading buying power throughout the economy, starting an oil trust fund, and maintaining an arm's-length relationship with the companies that produce the oil. The countries of the Middle East have taken ownership of the oil; now, they need to take ownership of the responsibility for wise economic management of that oil.

The future for sustained growth in economies and jobs in the Middle East will require building businesses outside the oil sector. Oil will not be a sufficient source of future economic growth and jobs. Governments can accomplish some important tasks, such as improving health, education, and infrastructure, but governments alone are highly unlikely to create sustained economic or job growth. Most Middle Eastern countries don't have strong growth coming from an array of private-sector companies across a range of industries. Instead, they have numerous costly rules and regulations that make it hard to start a business. But healthy private-sector firms are the typical formula for sustained growth in jobs and the economy. Something

like a million émigrés from Middle Eastern countries are now working in the United States and Western Europe. One step in the right direction might be for this diaspora population to reach back to the countries of the Middle East with financial and investment advice. ■

Suggested Reading

Christian Aid, "Fuelling Poverty: Oil, War, and Corruption."

World Bank, "Avoiding the Resource Curse."

———, "Oil and Gas: A Blessing or a Curse?"

Questions to Consider

1. Why are the economies of the Middle East not especially well off?

2. How can oil wealth make a country's economy less well off?

3. What kinds of government policies can help to ensure that oil or other resource wealth benefits the economy as a whole?

Africa's Geography and History

Lecture 19

Sub-Saharan Africa has been the lowest-income and slowest-growing part of the world economy since the Industrial Revolution about 200 years ago.

Since the Industrial Revolution about 200 years ago, sub-Saharan Africa has been both the lowest-income and the slowest-growing part of the world economy. The region of sub-Saharan Africa experienced sluggish and even negative economic growth from the early 1970s through the early 2000s. But the continent did see some progress on health and education indicators, an interesting case in which improvements in human well-being were not tracked by a growing economy. In this lecture, we will focus on sub-Saharan Africa, which consists of more than 48 countries, excluding the countries across the northern part of the continent, such as Morocco, Libya, and Egypt. Per capita GDP in sub-Saharan Africa barely moved from the early 1970s to the early 2000s. Poverty rates, measured by the $1-a-day standard, remain very high, at 41% of Africa's population in 2004. When looking at standard of living, it's important to consider more than just economics. The standard of living includes not just income but health, education, and other factors. Life expectancy and infant mortality are two statistics often used for rough comparisons of health over time. Life expectancy in sub-Saharan Africa has changed relatively little in recent decades, in part because of the negative effect of the AIDS epidemic. At the same time, infant mortality has declined significantly. Africa's education levels remain low by world standards but have increased substantially in recent decades.

The "poverty trap" is one traditional, prominent theory of why Africa's economy has not grown. Other countries and regions seem to have overcome the poverty trap, however, raising the question of whether this explanation is as powerful as it at first seems. The poverty trap argument holds that in countries with low levels of income, people need to spend their time and income on necessities for subsistence living. Such countries have low savings rates, resulting in little financial capital for investment in education. With no

development in human capital, the country becomes trapped in poverty. The poverty trap explanation sounds quite plausible, but in the last few decades, a number of countries have broken out of this scenario. Some countries that were very poor in the 1950s through the 1970s, often as poor as the countries of sub-Saharan Africa, have nonetheless found ways to grow. Countries in East Asia and China have sustained some of the world's highest savings rates when their economies were poor; conversely, some high-income countries, such as the United States, have sometimes had very low savings rates. A number of low-income countries have managed to start programs of mass education, including the United States early in its history and many African nations in the last decade or so. Economist Alexander Gerschenkron wrote an essay on the "advantages of backwardness," which noted that low-income economies in a world of richer economies can draw on technology and skills developed elsewhere. Some countries have used this strategy aggressively; African countries by and large have not done so.

The standard of living includes not just income but health, education, and other factors.

The development of Africa's economy has suffered over the decades from its geographic and climatic inheritance, which has hindered growth in a number of ways. Economies develop from specialization and trade, and in early stages of economic development, water transportation and ports have often played important roles in this development. However, Africa lacks rivers that can easily be navigated to the ocean, along with the port cities that often grow around bays or at the mouths of rivers.

Certain factors hold true in tropical climates that may hinder economic growth. In the tropics, people tend to live in the mountain highlands, rather than in coastal areas, because of heat and disease near the coasts. The climate and soil are less conducive to high levels of food production. Certain pests flourish, such as mosquitoes, and affect both human health and the health of crops. Technologies that are used elsewhere in the world may not transfer well to tropical climates. Some critics believe that these geographic and climate arguments are a cover-up for the real problems, often rooted in colonialism. Colonialism was not typically conducive to long-run economic

growth, but Africa had slow growth both before and after colonialism and in countries where colonialism was both more and less powerful. Whatever the underlying causes of Africa's economic sluggishness, the current problem Africa faces is to play the hand it has been dealt by history. Issues of geography and climate (or a colonialist past) shape the directions that can be chosen but do not dictate the outcomes. ■

Suggested Reading

Bloom and Sachs, "Geography, Demography, and Economic Growth in Africa."

Ndulu, et al., *Challenges of African Growth: Opportunities, Constraints and Strategic Directions*.

Zachary, "Trends: Africa Overreaches."

Questions to Consider

1. What is the "poverty trap" explanation for slow economic development? Why is it viewed as a less plausible explanation now than it was a few decades ago?

2. To what extent can the geographic and climatic explanations account for Africa's pattern of slow economic growth?

Time for Optimism on Africa?

Lecture 20

Predictions that Africa's economy is poised to take off have been fairly common over the last few decades—and consistently wrong.

Optimistic statements about Africa's economic future over the last several decades have often turned out to be wrong. But in the mid-2000s, Africa has seen some positive and potentially enduring economic news. Government reports about Africa's economic development over time seem to feel obliged to imply or predict that economic success is right around the corner. For several decades now, such predictions have failed to come true. Since the late 1990s, however, GDP growth for Africa as a whole has been in the range of 5 to 6% per year. By the mid-2000s, growth in per capita GDP was often 3 to 4% per year. And, of course, some countries consistently outperformed these averages. Oil exports explain only a modest part of this economic success.

Africa has historically had low rates of saving and investment and low rates of return on investment. These factors reinforce each other; that is, low returns on past investment discourage future investment. The advances in Africa's economy can be partially attributed to improvements along some basic dimensions: less inflation, reduced debt problems, fewer price controls, lower incidence of war, and greater interactions with the global economy. Sub-Saharan Africa has had considerable success in bringing down rates of inflation in recent decades. In the 1980s and the first half of the 1990s, annual inflation rates of 20% per year and more were common. By the mid-2000s, typical inflation rates were in the high single digits. Many governments of Africa had accumulated enormous debts by the mid-1990s; at that time, total government debt was roughly equal to the GDP of sub-Saharan Africa. Government interest payments alone were often 20% of government spending or more. But faster economic growth has allowed debt repayment for some countries, and debts have been forgiven in other countries. By the late 2000s, debt was down to 40% of Africa's GDP and falling.

African countries made substantial progress in the 1990s on reducing the number of price controls in their economies. Few governments in Africa have truly let go of the market yet, but the move toward greater market freedom has been real. Some countries in Africa, such as Sudan and Zimbabwe, have been torn with discord and civil war, which are bad news for economic growth. But looking at broad trends, civil discord in Africa has declined over recent decades, and democracy seems to be on the rise. Export-to-GDP ratios didn't move much for Africa from the 1960s up through the mid-1990s. But in recent years, Africa has begun to participate to a greater extent in the world economy. In addition, Africa is experiencing substantial inflows of financial capital from both private investors and emigrants now working elsewhere around the world.

Growth in Africa's economy will ultimately depend on the efforts of the African people and nations themselves.

Despite recent economic boosts, Africa still faces many challenges. It's hard to run a developing economy without a consistent supply of electrical power. Africa has copious energy resources, but they are extremely undeveloped. As a result, firms pay much higher costs, and households have to rely on firewood and kerosene. A continent-wide program to increase electrical-generating capacity, conducted over five to eight years, could pay off in substantially higher rates of economic growth.

The lack of water transportation routes has contributed to the dispersion of population and economic activity in Africa. Roads are a problem, too, with 40 to 50% of firms in Africa reporting that transportation is a severe constraint on doing business. In landlocked countries of Africa, freight costs can be one-third or more of the cost of delivering a product outside the country.

The ability to start and operate a business depends on a number of small components, such as the ease of obtaining licenses, registering property, getting a loan, paying taxes, and so on. In turn, many of these activities depend on the smooth functioning of government. Africa's economy lags well behind other regions in the ease of doing business, suggesting a need for systematic and widespread reform. In general, African countries need to increase taxes (which they have begun to do in the last decade or so) and

simplify their tax-collection mechanisms. The higher taxes are needed for infrastructure investments and to keep government debt problems under control. Agriculture is still the primary sector of output in most African economies and the occupation of most people. Raising productivity in this sector is essential. The important steps here include using available technologies that are well-suited to Africa and avoiding government policies that are biased against agriculture.

Africa is not as politically or economically important now as it was a few decades ago. Even in humanitarian terms, international assistance is increasingly directed elsewhere in the world, where it seems likely to have the most effect. Growth in Africa's economy will ultimately depend on the efforts of the African people and nations themselves. ■

Suggested Reading

International Monetary Fund, *Regional Economic Outlook: Sub-Saharan Africa*.

Ndulu, et al., *Challenges of African Growth: Opportunities, Constraints and Strategic Directions*.

Questions to Consider

1. Do you think Africa's spurt of growth in the mid-2000s is sustainable?

2. What policies seem most important in creating sustainable and rapid growth for Africa in the future?

Latin America and Import Substitution

Lecture 21

One of the most puzzling elements of Latin America's economy throughout this period is that although political leaders have often used the rhetoric of Populism, their economic policies have resulted in the most unequal income distribution of any region in the world.

By world standards, Latin America has long been a middle-income country but hasn't sustained progress toward joining the high-income countries. Simon Bolivar was known as the Liberator for his leadership in freeing the northern part of South America from Spanish rule in the early 19th century. But by the end of his life in 1830, even Bolivar was dismayed by the turmoil and lack of progress in Latin America. If the United States is looking for dynamic trading partners and economic opportunities, there is surely as much potential in Latin America as in other places that seem to be discussed more often, such as Eastern Europe. For our purposes, Latin America refers to a group of 32 countries in South America, Central America, and the Caribbean. The seven largest economies of the region are: Brazil, Mexico, Argentina, Peru, Chile, Colombia, and Venezuela. In the 1980s, economies across Latin America imploded under the pressure of hyperinflation and enormous foreign debts. Latin America always seems to have great economic promise, but it has become stuck in the middle of the world income distribution.

Simon Bolivar, who liberated northern South America from Spanish rule.

Two powerful and interrelated forces shaped Latin America's economic policies in the decades after World War II: Populism and import substitution. "Populism" has been defined as a set of

economic policies that are intended to mobilize support from the lower and middle classes and from organized labor, with backing from domestically oriented business, while attacking the ruling oligarchy, foreign enterprises, and large-scale industry that operates in world markets. From the 1950s up through the 1970s, much of Latin America followed the policy of "import substitution industrialization." In this policy, developing economies seek to avoid importing industrial or technology products from high-income countries and, instead, attempt to produce those products domestically. The tools used in pursuit of this policy include shutting out imports, implementing price controls, and paying out government subsidies to favored firms.

The Venezuelan currency, the bolivar, is named for Simon Bolivar.

The economy of Latin America shifted from healthy growth in the 1950s to the 1970s into a debt crisis and hyperinflation in the 1980s. By the mid-1960s, weaknesses had become apparent in Latin American economies. Firms received government subsidies but did not produce goods that were cheap enough or of high enough quality to be sold in foreign markets. Latin American firms became good at lobbying the government for more subsidies, which bred corruption. The government generated the money for these subsidies simply by printing more of it or by running large budget deficits, often using money borrowed from abroad. These actions led to inflation and a debt crisis.

Latin America's high levels of borrowing increased even more in the 1970s, and when economic conditions shifted in the 1980s, Latin American countries found themselves unable to repay. In the 1970s, the oil-exporting nations of OPEC raised the price of oil dramatically and deposited the U.S. dollars they earned in U.S. banks. The banks then faced the problem of where to lend those dollars; Latin America seemed a good recipient. Many Latin American governments agreed to guarantee repayment of the loans. At the time, it appeared that much of the money could be repaid at low or even negative real

interest rates. Higher interest rates in the late 1970s and early 1980s made these adjustable-rate loans harder to repay. With hyperinflation, recession, and lower oil prices, repayment became nearly impossible for some Latin American economies. In renegotiating debt, borrowers often claim they can repay almost nothing, while lenders offer to forgive some debt in exchange for economic reforms to ensure repayment of the rest. Ultimately, in Latin America, about one-sixth of the debt was forgiven, though in the meantime, while debt negotiations took place through the 1980s, no new capital flowed into the countries of Latin America; inflows of foreign capital did not resume until the 1990s.

Economically speaking, the 1980s was truly a Lost Decade for Latin America.

Inflation rates in Latin America were so high in the 1980s that if it weren't so harmful to the economies, the situation would almost be comic. For example, inflation in the entire region averaged more than 700% per year from 1986 to 1990. Reaching inflation of this magnitude requires extreme macroeconomic policies. The policies in Latin America included enormous budget deficits and expansive monetary policies, under which the central banks handed out loans at a reckless pace. When an economy is suffering from hyperinflation, businesses, consumers, and governments must focus on the day-to-day task of managing money to try to protect against losses from inflation. There is little time or incentive to focus on long-term investments for the gradual improvement of productivity.

Overall economic growth in Latin America averaged about 1% per year in the 1980s. But at the same time, the population was growing; thus, per capita GDP actually declined, on average, about 1% per year through the decade. Economically speaking, the 1980s was truly a Lost Decade for Latin America.

Even after decades of Populist leadership aimed at helping the poor, Latin America has long had among the highest levels of income inequality of any region in the world. A standard measure of income inequality is derived from splitting up income distribution into fifths, or quintiles, and looking at how much income is received by each fifth. Using this measure, the

income distribution in Latin America is the most unequal of any region in the world. This inequality in income is also manifested in government spending for education and health programs. In most of Latin America, spending on education and health care looks quite reasonable by world standards, but a disproportionate share of this spending goes to subsidizing top-level services for the upper-middle class and wealthy. In recent years, some promising steps have been taken to target more social spending to the poor. Populist societies are often characterized by the existence of powerful in-groups and out-groups in the production of goods and the labor market. For the poor to benefit in Latin America, the forces of Populism may need to be replaced by more conventional democratic political systems. ■

Suggested Reading

Cardoso and Helwege, *Latin America's Economy: Diversity, Trends, and Conflicts*.

Reid, *Forgotten Continent: The Battle for Latin America's Soul*.

Questions to Consider

1. What is import substitution industrialization, and what problems does it tend to bring?

2. What factors led to the Lost Decade of the 1980s in Latin America?

Markets or Populism in Latin America?

Lecture 22

In the early 1990s, some leaders in Latin America were willing to try a package of market-oriented reforms that went under the name of the "Washington consensus." The reforms at first appeared to have promising effects, but in the aftermath of the international financial crisis of 1997–1998, Latin America's economic growth stagnated again.

As the Lost Decade of the 1980s came to a close, Latin America faced a choice between continuing Populism and import substitution or implementing the steps of the so-called "Washington consensus." In 1989, a U.S. economist named John Williamson enunciated what he called the Washington consensus, a list of 10 recommendations for what Latin America should do to reform its economy. The steps were as follows: (1) Exercise fiscal discipline. (2) Reorder public expenditure priorities. (3) Undertake tax reform. (4) Liberalize interest rates. (5) Maintain competitive exchange rates. (6) Liberalize trade. (7) Liberalize opportunities for inward foreign direct investment. (8) Privatize state-owned industries. (9) Institute deregulation. (10) Define and enforce property rights.

The phrase "Washington consensus" often generates a wildly negative reaction that seems out of proportion to its actual contents. To some, it seems like a synonym for policies dictated to Latin American countries by American politicians, and to others, a synonym for extreme market-oriented policies that would ignore any concerns of workers and the poor.

In the 1990s, despite the controversy surrounding it, a number of elements of the Washington consensus were undertaken in various countries of Latin America. From the mid-1980s to the early 1990s, many major economies of Latin America took a long step back from Protectionism. Both tariff barriers and nontariff barriers—that is, required licenses and regulations on imports—declined substantially. Also, a variety of free-trade agreements have been signed among various combinations of Latin American nations. Foreign investment used to be somewhat unwelcome in Latin America

because it was thought to imply dependence and external control, rather than the preferred strategy of growth from within. But capital flows into Latin America were substantial in the late 1990s, often reaching \$50 billion to \$60 billion a year.

From the late 1980s to the late 1990s, more than half the privatizations in the world (by value) occurred in Latin America. Many state-owned firms had become huge money-losers, gobbling up public subsidies, but under new management, their efficiency often improved dramatically.

To an economist, the term "financial development" conveys how well a country's financial sector is able to collect capital from savers (how common it is for savers to have their money in financial institutions) and how often banks use that money to extend loans to the private sector. One measure of financial development is the amount of credit extended from banks as a share of GDP. Latin America has increased this ratio from 15% in the 1960s to 30% in the 1990s.

For the region as a whole, sensible fiscal and monetary policies brought inflation down to the low double digits by the 1990s and often to the high single digits by the 2000s.

Many Latin American countries have had a problem with borrowing large sums of money and later defaulting on the debt. The ratio of public debt to GDP in the region is around 50% in the mid-2000s, which is not much changed from a decade earlier. In the mid-1990s, Brazil was the last large economy in Latin America to bring its inflation rate under control. For the region as a whole, sensible fiscal and monetary policies brought inflation down to the low double digits by the 1990s and often to the high single digits by the 2000s.

A debate has raged since the 1990s about whether the market-oriented reforms across Latin America were working fairly well, were hardly working, or were actually counterproductive. Economic growth in Latin America since the implementation of the market-oriented reforms has been spotty:

modest but positive growth from 1991 to 1997, stagnant growth from 1998 to 2002, and more positive growth in the mid-2000s. There is widespread disappointment that the economic reforms have not accelerated the growth rate further.

One possible reaction to the slow growth is to decide that more time and further reform are needed. A second reaction is that the reforms themselves are causing the problems. A third reaction is that the reforms that have been carried out are missing the main problems. The case for additional reform points out that more than a few years may be needed to change the fundamental direction of an economy. Further, the worst period since the reforms, from 1998–2002, may be attributable to the international financial crises that affected many countries at that time. This crisis period is unlikely to be repeated.

Those in favor of further reform also point to evidence that existing reforms have had positive effects, although much work remains to be done in such areas as openness to trade, reform of labor markets, tax reform, and financial development. The case for slowing or reversing the reforms suggests that the reforms have been highly disruptive to industry in Latin America and that as governments have sought to control their spending, they have tended to back away from important, long-term infrastructure projects. Those who view the reforms as somewhat irrelevant argue that even in economies that have numerous issues to address to improve economic growth, it is usually a relatively small number of those issues that form the key constraints to growth at any given time. Economists in this camp tend to emphasize the need for broad institutional reforms.

Latin America has made enormous strides in the last few decades (with a few exceptions, of course) in improving its democratic institutions and moving toward a greater market orientation. However, changing long-term growth rates can be a slow-moving experience. No one has a magic key to unlock rapid growth for Latin America. ■

Suggested Reading

Oppenheimer, *Saving the Americas: The Dangerous Decline of Latin America and What the U.S. Must Do*.

Williamson, "Did the Washington Consensus Fail?"

Zettlemeyer, "Growth and Reforms in Latin America: A Survey of Facts and Arguments."

Questions to Consider

1. When talking about Latin American development, what is the "Washington consensus"?

2. What is the case for extending Latin America's economic reforms or the case for taking an alternative path?

Globalization in Goods and Services

Lecture 23

In 1950, world exports were about 7% of GDP; now, world exports are about 25% of GDP.

The increase in global trade of goods and services in the 21st century looks fairly large compared to the past, but such trade is expected to grow even more in the future. A simple measure of the expanded trade in goods and services is the ratio of exports to GDP. By that measure, globalization has roughly tripled or quadrupled in both the world economy and the U.S. economy since 1950.

Another way to think about how far globalization has proceeded is to think about how much trade might exist in a borderless world economy. In other words, to what degree do national borders still restrict trade? Studies have compared the amount of trade between regions within a country to trade between similar regions at similar distances across national borders. The amount of trade crossing national borders is usually only a fraction of the trade that takes place within a country. In a unified economy, competitive pressures mean that goods sell for similar prices in different locations. Goods cost generally the same across U.S. regions, but prices often differ considerably across national borders. For producers, crossing national borders means dealing with differences in legal systems, language, currencies, transportation systems, and more; such differences add extra costs in selling across national borders.

Both real-world experience and well-developed economic theory suggest strongly that rising levels of international trade generate overall gains for an economy. Times of expanding trade tend to be times of growing economies, and countries with expanding trade tend to be countries with growing economies. There are no counterexamples in modern history of countries that managed strong economic growth while shutting themselves off from international trade.

Gains from trade come from several sources. The classic economic theory of gains from trade is based on countries that differ in some ways. The theory states that if countries focus on producing where their productivity advantage is greatest or their productivity disadvantage is least, then all parties can benefit from trade. Much of the trade in the world, however, takes place between similar economies, with similar costs of production. For these countries, the gains from trade come from a combination of economies of scale, hyperspecialization, and variety. International trade brings greater competition and helps to spread knowledge and technology.

Both real-world experience and well-developed economic theory suggest strongly that rising levels of international trade generate overall gains for an economy.

Changes in prices of imports or exports can cause a shock to an economy. Although such changes in price may cause a redistribution of the gains from trade, they do not mean that trade has become an overall negative factor.

How will the globalization of goods and services affect workers? No evidence exists to support the idea that increases in trade systematically diminish the total number of jobs in an economy. Dislocation of workers often has no relationship with trade at all. The U.S. economy, for example, has a certain amount of job loss for a variety of reasons, including losses from domestic competition, bad management choices, and outdated products.

Trade affects some parts of economies more than others and, thus, contributes somewhat to inequality. The degree of inequality created by trade depends on the extent and effectiveness of economic institutions in an economy, such as unions, minimum wage laws, taxes, and government social programs. If inequality means that some are benefiting now but others will benefit in the future, it may not be such a bad thing.

One concern about globalization is that it will pressure governments to reduce regulations that are intended to protect the environment or workers. The theory of the “race to the bottom” holds that countries will seek to compete

in world markets by reducing regulations. As some countries do so, others will be economically pressured to follow, and the result will be a worldwide diminution of such rules. Globalization has been proceeding for decades, and the race to the bottom hasn't happened yet—not across U.S. states, nor in high-income countries, nor in other countries around the world.

Levels of world trade seem likely to rise in the future.Increasingly, manufacturers will seek to slice up the "value chain," the steps involved in the assembly of a final product. The combination of cheaper transportation, ease of information flow, and increased practical experience in working with these kinds of arrangements will make slicing up the value chain even more practical in the future. Trade in services has traditionally been much lower than trade in goods, but this pattern is shifting. Our definition of trade may change in the future as our sense of products to be traded and product origins becomes more fluid, but most people seem to adapt rapidly to increased globalization of trade. ■

Suggested Reading

Taylor, *Principles of Economics*. Chapters 3 and 6.

———, "The Truth about Globalization."

Questions to Consider

1. Is globalization more likely to be a trend that is just starting or a trend that has almost run its course?

2. What are the arguments explaining why trade brings economic gains?

3. Identify some of the concerns over why increased trade may be injurious to an economy, and (whether you agree with the answers or not) identify some of the responses economists give to those concerns.

Globalization of Capital Flows

Lecture 24

Economists debate the question of whether or how countries should proceed in allowing inflows and outflows of foreign capital.

Flows of international financial capital are often divided into portfolio investment and foreign direct investment. Both categories have grown rapidly in recent years. "Portfolio investment" refers to financial investments that do not involve actually managing a firm and, thus, can often be sold quickly. Portfolio investment rose sixfold from 1997 to 2006, from about $5 trillion in 1997 to more than $30 trillion by 2006. Foreign direct investment involves taking a management interest in a company in another country. This kind of investment increased quickly in the 1990s, peaking at $1.2 trillion in 2000; fell back to about $550 billion in 2002; then rose back to $1.2 trillion by 2006. Direct investment is not as liquid as portfolio investment and is far more likely to involve transfers of technology or specialized skills or supplier relationships.

The potential costs of international capital flows are written in financial crises, such as the debt crisis in Latin America in the 1980s and East Asia's financial crises in 1997–1998. The potential benefits appear to be substantial but more subtle than one might expect. International capital flows can threaten countries with two primary dangers, a debt crisis or a sudden stop, which can be interrelated. In a debt crisis, a country that has borrowed heavily from foreign investors may face extremely high interest payments and the possibility of defaulting on its debt. With a sudden stop, international capital first pours into an economy, then pours out, whipsawing the financial and banking systems in that country.

The classic argument in favor of international capital movement is to let capital flow from capital-rich to capital-poor economies. However, this outcome seems less important in the 2000s than some more subtle arguments about how international capital flows can share risk, allow intergenerational transfers of wealth, and build stronger economic institutions.

The classic argument for international capital flows is based on the idea that some countries have greater numbers of good investment opportunities than they have domestic savings; thus, an inflow of foreign investment capital will raise their growth rate. The basic theory here implies that financial capital should flow from high-income to low-income countries. Although this pattern sometimes occurs, it is not currently the predominant pattern in the world economy. Just as investing in only one company would offer insufficient diversification to most investors, being limited to investing in one country limits diversification, too. Sharing risk across countries can have substantial advantages for those economies that are relatively small or heavily dependent on a few industries.

With a sudden stop, international capital first pours into an economy, then pours out, whipsawing the financial and banking systems in that country.

Some degree of investment from middle-income countries in the stock markets of high-income countries can be explained by aging populations. Retirees in the United States and other high-income countries may have invested in financial assets that they are now looking to sell. Presumably, they will sell to younger workers who are looking to save for their own retirement. These younger workers can be found in such countries as Brazil, China, and India.

For countries with underdeveloped financial markets, inflows and outflows of financial capital can be potentially dangerous. However, as countries improve their financial regulations and relevant legal practices, inflows and outflows of capital are more likely to be beneficial. Ultimately, a virtuous circle is possible, in which an expansion of international financial capital flows helps to improve economic institutions.

Most of the risks of international capital flows occur for receiving countries; either they encounter a debt problem from receiving so much capital, or they experience a disruptive sudden stop of capital flows. What policies can offer protection against such risks? Countries receiving capital inflows can take a number of steps to reduce their vulnerability to large amounts of debt and sudden stops. Capital inflows often arrive through the banking system. If

banks are well regulated, they will look at their assets and liabilities, consider all the risks involved, and make plans to reduce those risks where possible. As we discussed in an earlier lecture, a country with large foreign exchange reserves is less vulnerable to a sudden stop. Since the 1997–1998 East Asian crisis, many countries have built up substantial foreign exchange reserves. Often, the reason for a country's debt problem is that the government runs large deficits. Governments need to be cautious about borrowing to their limits.

Most international borrowing now is fairly simple at root: Money is borrowed, then repaid with interest. But more complex financial contracts are possible. For example, agreements can be written so that the amount of repayment automatically decreases if a country goes into recession or if the price of a key export falls. Such contracts would force lenders to share more of the risk.

International agreements or agencies can sometimes step in when international capital flows have gone bad. For example, the World Bank and the International Monetary Fund have run the Heavily Indebted Poor Countries (HIPC) initiative since 1996 to reduce debt burdens for deserving poor countries.

A common reaction from some non-economists and politicians is to try to avoid the potential costs of foreign capital flows by blocking inflows or outflows of financial capital. Such policies can be effective, but in eliminating the potential costs, they also eliminate potential benefits.

The world economy remains some distance from being fully globalized. Capital does not yet move as easily around the world economy as it does, say, across the regions or states of the United States. One measure of the extent of financial globalization is the investors' "home bias," that is, the degree to which people from a given country invest in assets from their own country rather than diversifying globally. The relatively limited size of international capital flows used to be called "the mother of all puzzles in economics." After the increases of portfolio investment and foreign direct investment in recent years, this statement is not as true as it once was, but the potential exists for a great deal more expansion in international financial markets. ■

Suggested Reading

Crook, “A Cruel Sea of Capital.”

World Bank, *Global Development Finance: The Development Potential of Surging Capital Flows*.

Questions to Consider

1. Why is foreign direct investment typically preferred by recipient countries over portfolio investment?

2. What are some reasons why an international flow of financial capital might benefit the world economy?

3. What policies might reduce the risks of ever-larger flows of international financial capital?

The Foreign Exchange Market

Lecture 25

Exchange rates for currencies are determined in a market with enormous trading volume exceeding $3 trillion per day.

Exchange rates are determined in the market by all those who want to buy or sell currencies, including importers and exporters, investors, and central banks. An exchange rate is nothing more than the price of a currency expressed in terms of some other currency. For example, in early 2008, $150 in U.S. currency would have traded for about 100 euros. By 2007, more than $3 trillion per day was being traded in foreign exchange markets, far exceeding the total value of global trade in goods and services. U.S. dollars are involved in the vast majority of these trades. The sheer size of the exchange rate market tells us that most exchange rate trades are not directly related to trade of goods and services. Currencies are traded as the anticipated value of a currency changes. Currencies are bought when the value is expected to rise and sold when the value is expected to fall. Most deals in foreign exchange markets are related to financial investments or management of the risk that exchange rates will shift. Exchange rate markets are volatile. The price of currencies often changes by a few percentage points in a day and by much larger amounts over a few months. Currency markets can generate a herd effect; buyers crowd into a currency when it appears to be gaining value and push it higher still, while sellers exit a currency when it appears to be losing value, pushing it lower still.

One policy for dealing with exchange rates is to use a floating exchange rate. The United States and the other major countries of the world use floating exchange rates—that is, they let the exchange rate of their currency be determined in the foreign exchange market. Government macroeconomic policies and private-sector actions have an effect on how a floating exchange rate works in the economy. If an economy has low inflation, fairly stable growth, and not too much disruption, then there is relatively little reason for the exchange rate of its currency to shift. In effect, a country with a floating exchange rate "manages" its exchange rate by keeping the economic fundamentals sound. When those who operate in the international economy

know that they are exposed to floating exchange rates, they take steps to deal with the risks. They may avoid certain long-term international transactions or those that involve future payments because of the risk of exchange rates shifting. They may also use certain financial instruments in foreign exchange markets to hedge the risks.

The danger of floating exchange rates is that significant and abrupt changes can be caused by a combination of changes in economic factors that affect the exchange rate and financial speculators acting on that information. The results can impose costs (and sometimes benefits) on exports, imports, and financial investors. As we said, an exchange rate is just a price, and markets are, in general, good at seeking out the economically reasonable price that balances supply and demand. Government attempts to set prices through political decisions tend to have costly and undesirable consequences.

The price of currencies often changes by a few percentage points in a day and by much larger amounts over a few months.

A second policy for dealing with exchange rates is to use a fixed exchange rate. A fixed exchange rate doesn't just happen; it requires a government decision and follow-up action to make it work. Several policies can be used to fix exchange rates. With "dollarization," a country uses the U.S. dollar for its own currency. In 2007, 10 countries, including Ecuador and El Salvador, operated under this system. Another approach is to keep the exchange rate fixed with respect to some other currency or an average of several currencies. In 2007, 70 countries, including Saudi Arabia and Venezuela, followed this policy. With a "currency board" arrangement, a country's central bank holds enough in foreign exchange reserves that, if necessary, it can buy up its entire domestic money supply.

If the fixed exchange rate is too high, then exporters will have a tough time and the country is likely to have trade deficits. If the fixed exchange rate is too low, then exporters will benefit, but importers will have difficulty, and the result will be large trade surpluses.

Keeping a fixed exchange rate requires actions by a central bank, buying or selling its own currency as needed. However, foreign exchange reserves can run out or become too large, in which case a central bank may need to alter interest rate policies or let the exchange rate shift.

Fixed exchange rates make international trade and investment less risky, easier, and less costly. Fixing an exchange rate means that the value of one country's currency is linked to that of another country. If shifts occur, the first country will experience the same rises and falls as the second, for which investors in the original economy may not be well prepared.

High domestic inflation prevents permanently fixed exchange rates. Further, when a fixed exchange rate shifts, it can cause a high level of dislocation, because private actors in the economy had been planning on that fixed exchange rate and will be unprepared for the shift.

A third policy for dealing with exchange rates is to use a "soft-peg" exchange rate, which falls somewhere between floating and fixed rates. Under this policy, a country chooses a desired exchange rate, then authorizes the central bank to act to keep the actual exchange rate fairly close to the desired rate. "Fairly close" can mean plus or minus 2% or plus or minus 30%. The desired rate can sometimes crawl up or down over time. The key question about soft pegs is whether they combine the best or the worst features of floating and fixed exchange rates. In the 1990s, the trend in exchange rate regimes was "bipolar"—that is, countries chose fixed or floating rates but nothing in the middle. In the 2000s, however, elements of the soft-peg approach seem to be growing in popularity.

As we saw with the euro, some nations of Western Europe had enough in common, economically and politically, to form a common currency. It will be interesting to see whether other groups of nations—perhaps in Latin America or Africa—decide to follow this lead. ■

Suggested Reading

Federal Reserve Bank of New York, "The Basics of Foreign Trade and Exchange: Foreign Currency Exchange."

OECD, "Exchange Market Volatility and Securities Transaction Taxes."

Stone, Anderson, and Veyrune, "Exchange Rate Regimes: Fix or Float?"

Williamson, "The Choice of Exchange Rate Regime: The Relevance of International Experience to China's Decision."

Questions to Consider

1. Is most foreign exchange trade related to exports and imports or to financial management? How can you tell?

2. What are the advantages and disadvantages of fixed and floating exchange rates?

3. Do you think that other countries will follow the lead of the European Union in merging their currencies any time in the near future?

Migration—Senders and Recipients

Lecture 26

Compared with international flows of goods, services, and financial capital, international flows of labor remain highly restricted by immigration laws.

Recent decades have seen broad initiatives to promote more freedom in the trade of goods and services and in the flow of financial capital. By comparison, international migration remains relatively restricted, although the potential gains for migrants who have incomes below the world average are potentially quite large.

On a global level, there have been modest changes in immigration rates since the 1960s, but in the 2000s, a larger portion of emigrants are heading for high-income countries. The overall level of international migration as a share of world population has increased only modestly in recent decades, from about 2.5% of world population in 1960 to about 3% of world population in 2000. In 1970, a little less than half the migrant population in the world had moved to high-income countries; by 2000, almost two-thirds of the world migrant population had moved to high-income countries.

Three major groups are affected by migration: the immigrants themselves, the citizens of the receiving country, and the citizens of the sending country. Emigrants from low-income countries experience a substantial increase in standard of living when they move to high-income countries. The wage gap between countries sending and receiving migrants is probably larger now than it was during the great wave of immigration in the late 1800s. Moreover, the gain in wages understates the overall gains of living in a country that has public safety institutions, good schools, infrastructure for electricity and running water, and other advantages. We often tend to ignore the gains for immigrants personally and focus only on the benefits of migration for sending or receiving countries. But the fact that millions of people accrue advantages from migration deserves some attention. The benefits immigrants receive are highly concentrated in that particular group, rather as if they are lottery winners.

Countries receiving immigrants probably experience only modest economic gains compared to those of the immigrants themselves. The gains from immigration to high-income receiving countries are probably small, perhaps a few tenths of a percentage point for the GDP of a high-income country. Economic gains arise when migrants allow those already in the economy to adjust their work patterns to produce higher output or gain greater satisfaction in their lives. For example, less expensive daycare, takeout food, and housecleaning services—all made possible by immigrants—may enable a mother to feel that she can return to the paid workforce.

A number of economic studies suggest that immigration is only a minor cause of the difficulties faced by low-income workers already in the receiving country. State and local budgets for such services as education may be stretched by immigration, especially in states that receive a high number of immigrants. Overall, immigrants probably pay more in taxes than they receive back in benefits. Because the gains from immigration are small for high-income countries relative to the size of their economies, their decisions about immigration are not likely to be driven primarily by economic considerations.

Countries that send emigrants may suffer from “brain drain” but can also benefit from remittances, improved incentives to build human capital, and a diaspora effect. Remittances from emigrants back to their home countries are significant, on the order of $250 billion a year. This amount is much larger than the yearly total of global foreign aid and can exceed the value of a major export industry or the value of foreign direct investment entering the home country. A commonly expressed fear is that the migration of skilled and motivated workers to high-income countries hurts the economies of the low-income sending countries. Perhaps the answer here lies in adapting to the need for specially trained workers to be exported from low-income countries. Immigrants create networks of connections between their home

A commonly expressed fear is that the migration of skilled and motivated workers to high-income countries hurts the economies of the low-income sending countries.

countries and the countries to which they relocate. Perhaps the most famous economically powerful diaspora is the overseas Chinese, who have helped in developing China's export economy in recent decades.

Possible immigration policies for the future cover a spectrum, from using real or virtual fences to reduce immigration to allowing more temporary or permanent migration. Many nations are seeking to reduce the inflow of immigrants, either by building literal fences or with heightened enforcement efforts. But given the strong economic forces driving immigration—the wage gaps between countries and the aging populations in high-income nations—such barriers are likely to be only partially successful at best.

Some countries use a point system to encourage immigration of skilled workers, although again, this system is a bit like a lottery in which the winners are those who are allowed to migrate. Temporary workers who return to their home countries after a certain period of time might reduce some of the negative aspects of immigration on the domestic workforce and government budgets. Such migrants should not, however, become permanent workers with uncertain legal status.

In the future, if we are willing to change the traditional understanding of migration, we might benefit from a world migration organization similar to the World Trade Organization. ■

Suggested Reading

Bhagwati, "Borders Beyond Control."

International Organization for Migration, *World Migration 2005: Costs and Benefits of International Migration.*

Pritchett, *Let Their People Come: Breaking the Gridlock on Global Labor Mobility*.

Roberts, "Open Up: A Special Report on Migration."

Questions to Consider

1. How have global patterns of migration shifted over recent decades?

2. Who is likely to get the biggest gains from international migration: the sending country, the receiving country, or the migrants themselves?

3. Do you think creating a world migration organization would be a useful idea?

Global Population Growth
Lecture 27

The first prediction that population growth would outstrip resources and lead to mass starvation came more than two centuries ago, from the great economist Thomas Malthus, but it is a prediction that has been repeated many times since.

For two centuries, since the writings of the great economist Thomas Malthus, scholars have warned that overpopulation would lead to great human suffering and environmental damage. Malthus is perhaps best known today for his 1798 book *An Essay on the Principle of Population*. He argued that because food production increased arithmetically while population increased geometrically, population growth would outstrip food supplies. Paul Ehrlich, a biologist based at Stanford University, is probably the best-known modern writer on the same theme: If population growth rates do not decrease, human suffering and environmental degradation are likely to result. Although this prediction has been made repeatedly over a period of several centuries and proven to be wrong each time, it could still come true at some point in the future. Still, there's good reason to be skeptical. As we know, people are both consumers and producers. The emphasis on the human role as consumers leads to the fear of overpopulation, but as producers, people have shown extraordinary power to increase production and to address such issues as pollution and poverty. Note, too, that changes in conditions of work and consumption affect reproduction; in high-income economies, reproduction tends to decrease.

Thomas Malthus, who predicted that overpopulation would have catastrophic results.

World population is in the process of leveling out as part of a transition to a world that lives longer but has lower birthrates. Population growth took off around 1800, increasing from about 1 billion to 6 billion by 2000. Current projections are that world population will top out at about 9 billion in 2050, remaining at roughly that level for the rest of the 21st century. The populations of the United States, India, and Brazil are projected to grow at roughly the same rate as the world increase. Japan, Russia, and Italy are expected to see drops in population. In Nigeria, population is projected to grow much faster than the world average.

The "demographic transition" is the name that economists and demographers give to a pattern that has been seen around the world. This pattern involves three steps: (1) Life expectancy rises, which causes overall population to rise. (2) Birthrates fall, which causes the rate of population growth to fall. (3) The average age of the population increases.

Current projections are that world population will top out at about 9 billion in 2050, remaining at roughly that level for the rest of the 21st century.

The changes in global population, as well as in birthrates and life expectancy, will themselves bring a variety of changes, but they seem unlikely to result in disaster for humanity. They might even provide a boost to some developing economies. The demographic transition will bring substantial changes to the lives of parents, a shift in the focus of society from young to old, and a shift in where people live. One result of fewer children and longer lives is that both women and men spend a much smaller proportion of their adult lives as parents of small children. The greater relative size of the elderly population compared to the population of children suggests that many economic and social institutions, from schools to holidays to the job market, will be transformed. The high-income countries of the world have largely finished their demographic transitions, and the populations of the high-income nations will be flat or even declining in the 21st century. The 3 billion additional people who will come into the world in the next half century will primarily be from such regions as Africa, Asia, and Latin America.

People fear that higher population will lead to food shortages, the elimination of resources, and pollution. In the last three centuries, the population has risen dramatically, yet the average person today has a better diet and lives longer than his or her ancestors. This pattern suggests that Malthusian logic has not yet taken hold. It may seem inevitable that resources will run out, but resources are also discovered, not just used. Moreover, the value of resources—and what counts as a resource—is an economic issue of supply and demand. The use of resources is not like using up supplies in a lifeboat. Pollution is a real problem but one that can be addressed at some cost—which brings technology and innovation into the picture. Air and water pollution in the United States have been generally trending down for several decades.

Population and pollution have not reached the crisis levels that Malthus predicted.

Development economists talk of the "first demographic bonus" as the period of time a decade or so after birthrates have started to fall, when the economy has a relatively high proportion of working-age people. During that time, if those working-age people also save for retirement, the economy can have a "second demographic bonus" based on the resulting investment boom.

Debates over the impact of population on standard of living tend to pit prophets of doom against pragmatists, who point out that over the last couple of centuries, despite all the warts and flaws of humans, material progress continues to occur. ■

Suggested Reading

Emmett, "Malthus Reconsidered: Population, Natural Resources, and Markets."

Lee and Mason, "What Is the Demographic Dividend?"

United Nations, *Population Challenges and Development Goals*, 2005.

Questions to Consider

1. How have global population trends changed over the last several centuries, and how do they compare to the predictions for this century?

2. What is the "demographic transition," and why does it cause birthrates to slow down?

World Poverty—Growth or Redistribution?

Lecture 28

For the world economy as a whole, the working definition of poverty is people who live on the equivalent of less than $1 per day. Even by this standard, which sounds almost impossibly low, about 1 billion people—one-sixth of the world population—are poor.

Across the world, poverty is commonly defined by what has come to be known as the $1-a-day standard—that is, the poor are those who live on less than $1 a day. About 1 billion people around the world were below this level in 2004. The $1-a-day standard for measuring poverty originated in a 1990s report from the World Bank. It has been adjusted upward for inflation since then but is still conventionally referred to as $1 a day. The share of people in the world living on $1 a day has declined since 1990, but most of the gains have come in China and, to some extent, India.

The $1-a-day poverty line can be questioned, as can all economic statistics, both on the details of how it is measured and on its narrowness. For example, the $1-a-day poverty line requires converting local currencies into U.S. dollars and applies a common standard across rural and urban areas—indeed, across the entire world. Like any broad economic statistic, it is an imperfect fit with reality.

Nobel laureate economist Amartya Sen proposed what is called the "capabilities approach" to thinking about poverty. The idea is that income itself doesn't matter; what matters is that people are able to develop their capabilities, which means that they have access to good nutrition, education, and health care and that their lives include a degree of equality and democratic and social participation.

Each year, the United Nations puts out a *Human Development Report*, which ranks countries according to some of the factors addressed in the capabilities approach, including income measured by per capita GDP, life expectancy, and education levels. This report shows that countries with similar income levels, such as Russia and Chile, for example, can really be

quite different when other measures of standard of living are included. The capabilities approach gained force in 2000 when the UN General Assembly outlined the eight Millennium Development Goals, which are the following: (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality and empower women; (4) reduce child mortality; (5) improve maternal health; (6) combat HIV/AIDS, malaria, and other diseases; (7) ensure environmental sustainability; and (8) foster a global partnership for development.

There are essentially two approaches to tackling poverty: growing the economic pie or redistributing the pie.

There are essentially two approaches to tackling poverty: growing the economic pie or redistributing the pie. Economic growth has been wildly successful in reducing $1-a-day poverty in China and, to a lesser extent, in India. But other areas of the world, such as Africa, haven't seen much economic growth in recent decades. Further, growth will take decades to reach to most people at the bottom of the income distribution in low-income countries. Redistributing income can help to reduce poverty rates, but low-income countries often face two hurdles to effective redistribution: These countries often lack a government infrastructure for collecting and distributing money in a sensible way, and some of the countries are so poor that there is little to redistribute.

Even the very poor around the world have some power over their economic futures in the decisions they make about how to spend, how to save, how many children to have, and whether to migrate. Consumption patterns in low-income countries are not significantly different for those with very low incomes and the middle class. The share of income spent on food or housing is roughly the same, and even those living on less than $1 a day spend a share of their income on tobacco, alcohol, and entertainment.

The poor in low-income countries have about one child per family more than the middle class in those countries. Fewer children in a family can raise the average standard of living without additional income or redistribution. The poor in low-income countries are less likely to have salaried jobs and less

likely to migrate for jobs than those in the middle class. To some extent, this pattern reflects nothing more than luck—the choice of a potential employer to locate operations in a certain area, for example. This difference between the poor and the middle class is, perhaps, the most significant: Developing the demand side of the labor market is an important step in fighting poverty in low-income economies. ■

Suggested Reading

Banerjee and Duflo, "The Economic Lives of the Poor."

United Nations, "The Millennium Development Goals Report 2007."

World Bank, "PovertyNet: Understanding Poverty."

Questions to Consider

1. What are the strengths and weaknesses of the $1-a-day definition of poverty?

2. Which approach has had a greater effect on diminishing world poverty in the last few decades, economic growth or redistribution? Which one do you think holds the greatest potential in the next few years?

3. What kinds of limited economic flexibility do the very poor of the world have?

Global Food Markets—The Supply-Demand Race

Lecture 29

Thanks to increased demand from growing economies, such as China and India, combined with biofuel subsidies in the United States and Europe, food prices have risen and appear likely to remain higher for some years.

One of the most fundamental tasks for a global economy is to feed people, but more than 800 million people are undernourished in today's world. World food prices have risen dramatically in the first decade of the 21st century, reversing a 30-year pattern of gradually decreasing prices for food. However, food prices seem unlikely to exceed (at least by much) the levels prevailing in the 1970s. Higher food prices are a moderate problem for people in high-income countries. But for people in low-income countries, who already spend a large share of their incomes on food, higher food prices can be devastating. About 800 million people do not consume enough calories to maintain body weight while carrying out basic daily activities.

We can think of food prices as a race between forces of supply and forces of demand. Prices tell us which set of forces is winning the race. The two especially important reasons for rising food demand in the first decade of the 21st century are rising incomes in such countries as China and India and biofuels policies in high-income countries, such as the United States and the countries of the European Union.

Increasing population will raise demand for food products over time. But population alone is a relatively slow-changing and long-term factor and, thus, doesn't fully explain the increase in food prices since about 2005. As incomes rise, consumption of food products rises more rapidly. Higher incomes mean that people eat more meat, and more grain products are required to produce meat. Biofuels, such as ethanol, are made from farm products to be used as substitutes for gasoline. The dual promise of biofuels is that they can reduce oil use and contribute less to greenhouse gas emissions. The United States and the European Union have aggressive subsidy programs in place for biofuels.

However, when biofuels are made from corn, neither of these promises holds up very well, and the diversion of corn to biofuels contributes to higher food prices around the world. Other plants, including sugar and grass, may hold more promise for biofuels as technology develops.

The supply of agricultural products around the world doesn't change quickly in the short run. But in the long run, there are questions about whether food supply can keep up with the pressures of rising population and incomes. Agricultural output often rises and falls in the short run because of supply disruptions, such as drought. But governments and the private sector typically hold stockpiles that can be sold off when supplies are low, so the effect on prices is muted. Certain ongoing problems, such as soil erosion and water supplies, will cause regional problems in the future but will probably not hold back global agricultural output. However, the combination of ever-evolving pests and plant diseases and uncertain prospects for future technological progress raise some hard questions.

About 800 million people do not consume enough calories to maintain body weight while carrying out basic daily activities.

High prices for agricultural products, together with the challenges of feeding the world, should elicit a variety of responses in both low-income and high-income countries. The dual challenge for low-income countries is to feed the hungry and to build their agricultural production sectors for the future. Price controls and trade restraints are not the answers. In response to high food prices, low-income countries have often imposed price controls on food or prohibited food exports. But high prices encourage production and help low-income farmers. A better approach may be to let markets work in setting prices but to provide income subsidies to the poor as needed. In many low-income countries, about one-third of the total economy is agricultural output, but about two-thirds of the workers are in this sector. The challenge here is to help small farmers in low-income countries produce more. Policies that have sometimes proven useful include encouraging fertilizer use and irrigation, establishing clear ownership rights to farmland, and improving access to credit and creative marketing approaches.

High-income countries should moderate their current emphasis on producing biofuels and, in general, take the occurrence of higher food prices as an opportunity to reduce subsidies to agricultural producers. In the late 2000s, neither corn-based ethanol nor oilseed-based biodiesel is a cost-effective solution to energy concerns. The governments of the United States and the countries of the European Union should focus on funding biofuels research rather than additional production along these lines. Through a variety of mechanisms, including support for crop prices, income payments, and import limits, high-income countries provide the equivalent of about $1 billion a day in support to their farmers. With high food prices, these subsidies should be reduced, and cutbacks here would provide substantial benefits to agricultural producers in low-income countries.

Substantial and continued increases in agricultural research-and-development spending will be necessary both to help farmers in low-income countries and to feed the world in the coming decades. Two main focuses will be to sustain and increase output in the face of evolving pest and plant disease problems and to ensure productivity gains for farmers in low-income countries. ■

Suggested Reading

"Briefing: Food and the Poor: The New Face of Hunger." *The Economist*.

"Briefing: Food Prices: Cheap No More." *The Economist*.

OECD and UN Food and Agriculture Organization (FAO), *OECD-FAO Agricultural Outlook, 2008–2017: Highlights*.

World Bank, *World Development Report 2008: Agriculture for Development.*

Questions to Consider

1. What economic factors explain the sharp increase in food prices in the last few years?

2. What are some of your preferred policies for dealing with high food prices around the world?

An Urbanizing World

Lecture 30

As economies grow, people leave their farms and head for the cities. As the economies of Africa, Asia, and Latin America develop in the next few decades—and their populations continue to expand—the result will be enormous megacities of 10 million people and more.

Throughout history and around the world, economic growth has meant more people living in cities. In the future, as populations increase, especially in low-income countries, "megacities" of more than 10 million people will become more common. In the United States, about 5% of the population lived in cities in 1800. This figure rose to 15% by 1850, 50% by 1920, and 79% in 2000. Around the world, high-income countries have more people living in cities, typically about 80% of the population, than low-income countries do. In India, Africa, and China, the share of population living in cities is in the range of 30 to 40%. In 2007, the number of people in urban areas exceeded the number in rural areas. By 2050, about 70% of all people in the world will live in urban areas. In a few decades, such cities as London, Chicago, and Paris will be replaced among the 25 most populous cities in the world by such cities as Kinshasa (Democratic Republic of the Congo), Istanbul (Turkey), and Shenzhen (China). In 2025, all of the 25 most populous cities will have more than 10 million people and eight will have more than 20 million people.

In modern times, cities represent an economic balancing act between the benefits and costs of having many people in one place. Historically, this balancing act was affected by transportation costs and by the shift from agriculture to manufacturing. In the past, cities were viewed as a destination for people leaving farms, and the locations of cities were often determined by costs of travel and transportation. Human civilization has moved from small, mobile groups of hunter-gatherers, to farming settlements, to towns that fostered trade, to cities involved in manufacturing and services.The locations of cities were often determined by the accessibility of low-cost transportation to certain sites. Because water transportation was cheap, cities

were often located at the mouth of a river or near a good natural harbor. The location of modern cities is influenced by other factors, as well, including other kinds of transportation and access to sources of electrical power.

"Agglomeration" is a term for economic activity concentrated in a certain location. Gains from agglomeration include: scale economies, shared inputs, lower transaction costs, and reductions in certain risks. Urban migrants—even those with low skills in low-income countries—typically experience substantial gains when moving to urban areas. Agglomeration also results in problems and costs. Real estate prices are usually high at the center of agglomeration, which drives some housing and economic activity to the fringes. Sprawling suburban growth can result. The concentrations of people and anonymity found in cities help crime flourish. Further, large numbers of people create the need for large-scale infrastructure services—electricity, water, sewage, garbage pickup, roads, and police and fire protection. If these services are not provided, the result can be pollution, disease, and crime.

In the United States, about 5% of the population lived in cities in 1800. This figure rose to 15% by 1850, 50% by 1920, and 79% in 2000.

Megacities in low-income countries usually don't have the resources to provide infrastructure to support their populations. When a city's population expands dramatically, it needs more infrastructure: houses, roads, sewers, electricity, and so on. In the urban slums of the megacities in low-income countries, this infrastructure is often in short supply. When providing infrastructure in low-income megacities, it's important to recognize that the technological solutions of high-income countries often aren't fully workable. The challenge is to work gradually through a series of improvements that are locally appropriate and affordable. Local government, anywhere in the world, is often focused more on facilitating land deals than providing services. Even when local government is democratically elected, voters may have difficulty monitoring it effectively. One solution is for governments to work with various interest groups, either to carry out work or to monitor ongoing projects.

Many low-income countries around the world have enacted regulations and taxes to discourage or block urban migration. But because the economic gains of urban migration are so great, the trend will not be easily discouraged. Moreover, urban migrants can help to produce economic growth if the cities of the future can provide basic public services. ■

Suggested Reading

Gall, "Mending Brazil's Megacity."

United Nations, *World Urbanization Prospects: The 2007 Revision*, "Executive Summary."

"The World Goes to Town: A Special Report on Cities." *The Economist*.

Questions to Consider

1. What forces are making cities bigger? Do you see any economic or political limits to those forces?

2. What are the major challenges for a megacity, and what are some of the ways megacities can meet those challenges?

Women in the Global Economy

Lecture 31

Women are treated unequally in much of the world in access to education, health care, jobs, property, and political power. This situation is, first and foremost, a human tragedy, but it also has economic consequences.

Based on birthrates and health patterns in high-income countries, the world population has about 100 million fewer women than one would expect. More men are born than women, but women tend to be healthier than men. The result is that women outnumber men in the populations of high-income countries by about 105 women for every 100 men. In many other countries around the world, however, men outnumber women. In 1990, Nobel laureate economist Amartya Sen calculated that based on what we know about birthrates and health across genders, the world is missing roughly 100 million women who should be alive. Lower standards of health care for girls seems to be a major contributor to the rates of missing women, along with sex-selective abortion. High rates of maternal mortality also lower the number of women in the population.

It's difficult to measure many of the differences in how men and women are treated across countries, but data on education captures some important differences. In many regions of the world, literacy rates and education levels are lower for girls and women than for boys and men. Literacy rates for adult men and women are similar in North America, across Europe, and in Latin America. However, in the Arab states, South and West Asia, and across sub-Saharan Africa, literacy rates for women are about 20 percentage points below those for men. The gender gap in school enrollment rates is quite a bit lower than the gap in literacy rates. In the regions of the world that lag in gender equity—the Middle East, sub-Saharan Africa, parts of Asia—secondary-school enrollments are only about 7 percentage points lower for females than males. In the next 5 to 10 years, the gap here may close completely.

The direct effect of less education is that women have a lower chance of getting jobs and lower wages in the jobs they get. Women also play a significant role in the education of children. Better-educated women have healthier children who are themselves better educated and, thus, have better life prospects.

Another measure of equality is women's role in the workforce, which is increasing in some regions but not others. In most regions of the world, the share of men in the workforce hasn't changed much in recent decades. The share of women in the workforce has risen notably in Latin America and in the Middle East but not elsewhere.

Better-educated women have healthier children who are themselves better educated and, thus, have better life prospects.

When a low-income economy depends primarily on agriculture, women often hold at least part-time jobs to generate some cash income. As the economy develops and more wage-labor jobs become available, a common pattern is that men take the paid-labor jobs, and women withdraw from the paid workforce, while continuing to generate a considerable degree of nonmarket agricultural and household production. As the economy develops further, the labor force participation of women rises.

When women have control over income, they also have greater influence over household spending, which they tend to direct toward health care and education for children. Better and more jobs for women in the future will require continuing gains in education, better access to credit markets, and changes in social attitudes.

Women are dramatically underrepresented as members of legislative bodies or as political leaders. Most of the countries with the highest representation of women have formal or informal quotas for the number of women in the legislature or in other positions. The share of members of national legislatures who are women has risen gradually over time, reaching about 16% of all members by 2005. The countries that have the highest proportions of women

legislators almost all have voluntary or involuntary quotas to increase the share of women in the legislature.

There is some limited evidence that countries with more women in their legislatures tend to devote more resources to education and health spending. Also, about 40 countries have tried "gender budgeting," which means analyzing government taxes and spending in terms of their effects by gender.

From a strictly economic standpoint, equality for women in health, education, the workplace, and politics seems to lead, in various ways and along various pathways, to faster economic growth. It expands the life choices available to the world's population and gives people of both genders a better chance to choose the lives they want to lead. ■

Suggested Reading

Buvinic and King, "Smart Economics."

Inter-Parliamentary Union, "Women in Politics: 60 Years in Retrospect," 2006.

Sen, "More Than 100 Million Women Are Missing."

World Bank, "Promoting Gender Equality and Women's Empowerment."

Questions to Consider

1. Set aside the human rights arguments for gender equality—what are the economic reasons that gender equality is important?

2. In what areas or regions have women made greater progress toward equality, and in what areas or regions have they made less progress?

Improving Governance, Fighting Corruption

Lecture 32

The same force of self-interest that powers free markets to generate economic growth can also lead to corruption and bribery.

The quality of governance in a country, broadly understood, helps to determine whether corruption is widespread. One way to make a living is to do work that others will pay for voluntarily; the other way is to obtain gains under coercion or fraud. The same drive of self-interest that powers a market economy can also power corruption. A prominent modern economist named Jack Hirshleifer described this as the "dark side" of the force of self-interest. The world has witnessed many examples of flagrant corruption, from Nigeria to Zaire, Indonesia to the Philippines, Iraq to Angola, and others. Some rough estimates extrapolate from piecemeal data to conclude that corruption costs $1 trillion every year around the world.

A number of organizations publish rankings related to the quality of governance and the extent of corruption in countries around the world. The nongovernmental organization Transparency International compiles data from a variety of other organizations to rank countries by their levels of corruption.

Sorting out why some high-corruption economies have more growth than other high-corruption economies is a difficult task. In general, countries of the world with better governance and lower levels of corruption have higher incomes, which suggests a cause-and-effect relationship but falls short of proving it. Perhaps more developed economies are better at fighting corruption. Further, a number of countries with rapid growth rates in recent years, including China, India, Russia, and Brazil, also have fairly high levels of corruption. It may be hard to see the effects of corruption on growth for several reasons. In some cases, corruption may be the result of a vigorous economy trying to break free of outdated and stifling regulations. The indirect costs of corruption are probably larger, and certainly harder to measure, than the direct effects. In general, corruption is only one of many factors involved in economic growth. Economists have used a variety of strategies to try to

analyze the connections between corruption and economic growth, none of which is completely satisfactory. One common finding is that corruption affects an economy's growth rate by 0.5% to 1% per year. It also seems likely that corruption has a significant influence on the willingness of foreign investors to become involved in a given country.

Just reorganizing existing political and legal institutions or signing a law or a treaty against corruption may not have much effect. The challenge is to come up with new sources of pressure on the political system. There are three key ingredients for reducing corruption and improving governance. (1) Political actors need a clear set of rules or goals to guide their actions. (2) Information about the achievement of goals and the costs incurred must be broadly and transparently available. (3) When goals are not met or rules are not followed, those responsible must be held accountable.

Some rough estimates extrapolate from piecemeal data to conclude that corruption costs $1 trillion every year around the world.

Several international organizations have set standards for transparency and accountability in government budgeting and procurement. Some countries adopt these templates readily, while others are pressured into using them as a condition of loans, debt relief, or aid. When government budget information is transparent, citizen grassroots groups can then hold at least some officials to account.

Another step toward better governance and less corruption is monitoring of contracts by outsiders. An international campaign known as Publish What You Pay encourages companies, especially those involved in natural resource extraction, including oil, to make public their payments to foreign governments to ensure that the money doesn't simply disappear. Media reports can both expose corruption and lead to public calls for accountability.

In the last 20 years or so, more than 50 low-income countries have hired private outside firms to inspect imports and, in some cases, to collect customs duties. Interactions with high-income countries that have relatively

low corruption can help limit corruption elsewhere. A treaty among high-income countries, in effect since 1999, has made bribery of political officials illegal. In addition, foreign competition enables those seeking to do business in high-corruption countries to sell to companies that don't expect kickbacks or to get loans from banks that don't accept bribes.

In some countries, independent anticorruption agencies have worked to reduce corruption. But encouraging a corrupt government to set up a prosecutor with special powers to go after corrupt politicians often becomes a way to put political opponents in jail.

There is no straightforward way to end corruption, nor does reducing corruption necessarily bring about an economic boost. But it does seem true that reducing corruption around the world would be a substantial step forward in helping economic policies work better and in improving the incentives for economic growth in many countries. ■

Suggested Reading

Transparency International, "FAQs for Journalists: Facts and Figures on Corruption."

———, *Global Corruption Report 2007*.

World Bank, "Governance as Part of Global Monitoring."

Questions to Consider

1. Why is it difficult to untangle the links between governance or corruption and economic growth?

2. What are some promising avenues for reducing corruption and improving governance?

Foreign Aid—Promises and Limits

Lecture 33

Foreign aid feels like a moral imperative for high-income countries, but even so, it should meet a test of practicality.

The amounts given in foreign aid worldwide are actually less than many people believe. Foreign aid in the mid-2000s was a little over $100 billion per year. The biggest donors were the high-income economies: the United States, Japan, Germany, the United Kingdom, and France. The official "goal" for development aid, agreed upon at the Monterrey Financing for Development Conference held in 2002, is that all high-income countries should give 0.7% of GDP. Meeting this goal would require a substantial increase in foreign aid contributions from the high-income countries of the world and would roughly double the current level of foreign aid given yearly. Many Americans believe that foreign aid amounts to 20 to 25% of government spending, but the actual number is about 1% of government spending. Perhaps if more citizens were aware of this fact, raising the levels of foreign aid would be more politically acceptable.

The proverb about giving a man a fish versus teaching a man to fish sums up the two main purposes of foreign aid. Disaster aid is directed toward immediate needs in the aftermath of tsunamis, earthquakes, and so on. Other foreign aid is aimed at trying to build long-term productive capacity for the future. Foreign aid has clearly had some remarkable successes, but it is difficult to show that it has increased the overall rate of macroeconomic growth. How can this mixture of success and failure be explained?

Foreign aid has some remarkable accomplishments to its credit. In health, these gains include vaccination programs and the prevention of river blindness, malaria, and other diseases. In agricultural technology, foreign aid assisted in the green revolution and programs to improve irrigation and fertilizer. In education, it has brought about improvements in both student and teacher attendance.

The connection between foreign aid and long-term growth rates may be difficult to identify for a number of reasons. Emergency aid, for example, isn't intended to improve growth. Expanding education or promoting democracy may improve an economy in the long run, but such advancements may not translate to increased growth rates for decades. In addition, some aid, such as U.S. aid in the Middle East, is aimed less at enhancing economic growth and more at furthering geopolitical relationships. Thus, only a portion of aid is even expected to provide economic gains in the short or mid-term. Some of the poorest countries in the world also have severely dysfunctional governments. If a country's low-income status is even partially attributable to government incompetence, foreign aid is unlikely to be effective in fostering growth. Many countries have low-income economies for a number of interrelated reasons, and aid programs are often too small to address all these problems. Programs that provide vaccinations or improve infant survival rates may provide social gains that aren't measured by economic statistics. Because they have money, aid agencies may have disproportionate power in low-income countries. In this situation, governments and citizens in receiving countries may focus on accommodating the agency to receive additional aid rather than generating overall economic growth. Low-income countries may also have limited administrative capacities, which can be tied up by aid agencies.

Many Americans believe that foreign aid amounts to 20 to 25% of government spending, but the actual number is about 1% of government spending.

Foreign aid is more likely to be effective when it is administered by aid agencies with specific areas of expertise (such as health care), when it goes to low-income countries that have low levels of government corruption, when the aid reaches low-income people directly, and when aid programs require transparency and accountability. Foreign aid seems to be more effective when it is administered by donor agencies that have developed expertise in the conditions of a particular country or in specific areas of need, such as health care or education. Most current giving, however, is highly fragmented and unspecialized. Aid directed to low-income countries with relatively low levels of corruption and autocracy is more likely to be beneficial. However,

aid flows don't seem to change much in response to changes in corruption over time. Further, aid flows have changed only modestly over time to target countries with the lowest incomes. "Technical assistance" is aid aimed at building up higher levels of expertise in low-income countries so that they can carry out their own infrastructure or other projects in the future. In practice, such aid often flows to outside specialists because the required expertise simply doesn't exist within the receiving country. Moreover, technical assistance aid may involve the imposition of outside priorities on the receiving country. Foreign aid tends to work best when its administration is transparent and accountable, when a clear goal is specified, and when the recipients are held accountable for meeting that goal.

Foreign aid can bring health and education benefits; it can help lay the groundwork for economic growth. But foreign aid won't grow and build on itself from year to year in the same way as economic growth. For raising the standard of living of the poorest people in the world, fostering economic growth is vastly more important than providing any politically conceivable amount of foreign aid. ■

Suggested Reading

Easterly, *The White Man's Burden: Why the West's Efforts to Aid the Rest of the World Have Done So Much Ill and So Little Good*.

Roodman, "Macro Aid Effectiveness Research: A Guide for the Perplexed."

Sachs, *The End of Poverty: Economic Possibilities for Our Time*.

Questions to Consider

1. If you had the job of figuring out whether aid to a certain country was being used well or poorly, what factors would you consider?

2. If you could coordinate how foreign aid is given from all around the world, what steps would you propose?

The Multilaterals—World Bank, IMF, WTO

Lecture 34

In the modern globalized economy, these functions appear musty and dated. The world economy can still use forums for dealing with such issues as directing flows of aid to low-income economies, managing international financial crises, and setting rules for foreign trade, but these organizations need to evolve if they are to be relevant for the economy of the future.

The World Bank has long emphasized its role in providing loans to countries that might not otherwise have access to capital. In the future, it may have a more useful role as a provider of expertise and credibility. The World Bank is officially divided into two parts: the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). The IBRD raises funds by selling bonds on world markets and provides loans to middle-income and credit-worthy low-income countries. It typically raises $10 to $15 billion a year. The IDA seeks to help the poorest countries in the world. Its funding comes mainly from donor countries, and it lends at conditions more favorable than credit markets generally offer.

The World Bank's organizational structure includes a board of governors with representatives from all 185 member countries. There are 24 executive directors, of which 5 are appointed and 19 are elected. Traditionally, the president of the World Bank is a U.S. national. The effect of World Bank lending is limited in two ways. Global capital markets have evolved rapidly in recent years so that even low-income countries can borrow billions of dollars. Additional lending from the World Bank can have, at most, a modest effect. Poorly governed countries are likely to need the most help, but foreign aid given to such countries is least likely to provide benefits. The core skill of the World Bank isn't its ability to lend money but its expertise in evaluating and managing projects and providing a credible outside check to ensure transparency and honesty.

In the past, the role of the IMF has been to assist in addressing international financial crises, but a better role for the future would be to help prevent crises from occurring. The board of governors of the IMF includes representatives from all 185 member countries and meets once a year. The managing director of the IMF is traditionally a European. There are 24 executive directors; 8 are appointed by individual countries and the other 16 are elected for two-year terms by groups of member countries. The IMF receives funds from its 185 member countries and makes those funds available when international financial crises occur. Broadly speaking, the IMF focuses on international cooperation on monetary issues. This mission was originally focused on keeping exchange rates between nations relatively fixed, but in recent decades, this focus has changed.

The core skill of the World Bank isn't its ability to lend money but its expertise in evaluating and managing projects and providing a credible outside check to ensure transparency and honesty.

In the decades before the establishment of the IMF, when economies turned bad, it was fairly common for nations to respond by trying to devalue their currency to stimulate exports. But this attempt to help an economy grow at the expense of trading partners, known as "beggar thy neighbor," rarely worked, instead leading to further devaluations. In recent decades, nations have turned to the IMF when they have balance-of-payments problems—that is, investment funds are fleeing the country, the exchange rate is collapsing, banks are going bankrupt, and recession is imminent. Examples include the countries of East Asia in the late 1990s and Argentina around 2002. The IMF is not primarily a development bank, although it sometimes participates in debt-relief efforts or in providing below-market loans to low-income countries. The IMF's money is usually welcome, but the conditions and advice that come with the money may be highly controversial.

Many middle-income countries around the world have trade surpluses, with a net inflow of international funds. Some have built up sovereign wealth funds, which are controlled by their governments. A country with balance-of-payments problems now has a variety of places to turn other than the IMF.

In the future, the IMF should shift its focus from providing assistance after a financial crisis has occurred to helping countries institute macro- and microeconomic policies that reduce the likelihood of financial crisis in the first place.

The World Trade Organization deals with the rules of trade among about 150 nations. The WTO has had considerable success in reducing tariffs, expanding its membership and agenda, and addressing concerns of low-income countries. Paradoxically, each of these successes has made it more difficult for the current Doha round of WTO talks to reach agreement. Two major gains of GATT and WTO negotiations were the reduction in average world tariffs to about one-tenth their levels in the 1940s and the establishment of the nondiscrimination principle, that is, when tariffs are cut, they should be cut for all trading partners. Early rounds of the GATT talks included only a few dozen nations and focused on tariffs. Since the 1940s, the trade talks have grown substantially and now require years to reach agreement. The most recent Doha round of WTO talks includes more than 150 countries and encompasses a lengthy agenda of trade-related issues. In the past, high-income countries set the agenda for WTO negotiations because they had the buying power that low-income countries sought to exploit. Currently, the Doha Declaration calls for "special and differential treatment for developing countries," meaning that low- and middle-income countries have more influence in determining issues to be addressed. With or without further WTO agreements, globalization marches on, driven by improvements in transportation, communication, and private-sector financial and legal arrangements. It seems almost impossible to expect that 151 countries will reach agreement on a lengthy agenda of trade-related issues. Perhaps it's time to consider the idea of more focused agreements among subsets of countries.

The topics of economic development, international financial stability, and rules for world trade remain highly important. The challenge for the World Bank, the IMF, and the WTO is to develop organizational structures that build on their strengths and historical purposes to meet the evolving needs of the globalizing economy. ■

Suggested Reading

International Monetary Fund, "What Is the IMF?"

Rajan, "The Future of the IMF and the World Bank."

World Bank, "About Us."

World Trade Organization, *The Future of the WTO: Addressing Institutional Challenges in the New Millennium*, 2004.

———, "What Is the WTO?" updated in February 2007.

Questions to Consider

1. How do the tasks of the World Bank, IMF, and WTO differ?

2. How much power do the World Bank, the IMF, and the WTO wield in the context of the world economy as a whole?

3. What are the fundamental drivers behind the changes we have discussed in the underlying missions of the multilateral economic institutions?

The Economics of Global Climate Change

Lecture 35

This lecture starts with the assumption that predictions of global warming may be correct. If that's true, what economic costs can we expect, and what policy options should we pursue?

The scientific argument for climate change, supported by a healthy majority of those who work in the field, is that increasing concentrations of carbon dioxide and certain other gases trap heat near the Earth's surface. The result is global warming and the potential for disruptive changes in weather and climate. Some sunlight is absorbed into the Earth as heat; some is radiated back into space. If the amount of sunlight radiated back into space is reduced, then the Earth will tend to get warmer. Certain gases, primarily carbon dioxide but also methane, nitrous oxide, and chlorofluorocarbons, trap more infrared radiation and, thus, cause Earth's temperatures to rise.

The most prominent consensus estimates of rising temperatures and environmental consequences come from the Intergovernmental Panel on Climate Change (IPCC). The panel includes both scientists and government officials. The IPCC's middle-range estimate of global warming suggests that average world temperatures will rise by 2.8 degrees Celsius by 2100, at a cost of about 3% of world GDP at that time. Some regions, mainly northern temperate areas, will benefit from global warming, while parts of Asia and Africa will suffer. The IPCC also notes that the increase in temperature could be higher or lower than the midrange scenario, from 1.8 degrees to 4 degrees. At higher temperatures, the chances of low-probability but high-cost events related to weather and climate would increase. The costs of global warming increase over time as the extent of warming increases. For example, the costs may be 1% of world GDP in 2050 but increase to 2.8% in 2100 and 13% by 2200.

The standard economic response to the risk of uncertain adverse events is to buy insurance, and in fact, policies related to global warming are a kind of

insurance. Of course, to make sensible decisions about insurance, we have to decide how bad the risk is and how much insurance it makes sense to buy.

Evaluating the problem of climate change involves some difficult questions of how to value costs and benefits. It's difficult for public policy to deal with events that have low probability but potentially very high costs. Ignoring such events doesn't make sense because their potential costs are high. But undertaking costly policies to prevent such events doesn't make sense either—after all, they are low probability. The challenge here is to find low-cost approaches that reduce the risk, while recognizing that some risk will remain. The costs of dealing with climate change are incurred in the present or near future; the benefits are gained much further off in the future. When comparing costs and benefits that occur over time, economists usually apply a "discount rate" to the future—that is, costs and benefits in the future are valued at less than costs and benefits in the present. A lower discount rate means that costs and benefits in the future are given approximately the same weight or value as those in the present; a higher discount rate means that costs and benefits in the future are not valued as highly as those in the present. The argument over an appropriate discount rate for the future may be the single biggest question in making decisions about what climate change policies are worthwhile.

The costs of global warming increase over time as the extent of warming increases. For example, the costs may be 1% of world GDP in 2050 but increase to 2.8% in 2100 and 13% by 2200.

A sensible climate change policy will focus on market-oriented environmental tools; it will respect the time dimension of the problem of global warming; and it will have an international component. With "command-and-control" policies, governments set limits, for example, on how much pollution can be emitted and sometimes specify the pollution-control technology to be used. The weakness of this approach is that industries have no incentive to reduce pollution beyond the government's limits. Market-oriented environmental tools include broad incentives to reduce pollution but allow firms and households to adapt as they see fit. Carbon taxes and "cap-and-trade"

arrangements are examples of market-oriented policies that seem preferable to a command-and-control regulatory approach. The costs of climate change increase over time. If market-oriented policies to address climate change are phased in over time, they can stabilize carbon emissions at a modest cost. Market-oriented policies also emphasize the importance of developing improved technologies over time. Industries in highly developed economies, such as the United States and the economies of Europe, have traditionally emitted the highest levels of carbon, but China is now the biggest emitter of carbon in the world, and emissions are increasing in India, Russia, and Brazil, as well. An enforceable worldwide treaty to reduce carbon emissions seems unlikely; more workable solutions might include loose international agreements among regions of the world and global sharing of technology. ■

Suggested Reading

International Monetary Fund, "Climate Change and the Global Economy."

Landsburg, "Save the Earth in Six Hard Questions: What Al Gore Doesn't Understand about Climate Change."

Metcalf, "An Equitable Tax Reform to Address Global Climate Change."

Stavins, "A U.S. Cap-and-Trade System to Address Global Climate Change."

Stern, "Stern Review on the Economics of Climate Change."

Questions to Consider

1. What discount rate would you favor for thinking about the costs and benefits of global warming?

2. How would your reaction to global warming change if you thought the outcome had a greater range of uncertainty? What if the outcome had a lesser range of uncertainty?

3. Why is an international dimension important in climate change policy?

Globalization and Convergence

Lecture 36

The process of globalization looks different depending on your perspective, whether you are looking from the still-dominant U.S. economy or from other countries and regions that are going through their own evolutions.

The world economy is not yet close to being a unified whole. As a result, the story of globalization is still being told in terms of national and regional economies and the increase in their economic interactions. Simply put, different parts of the world are experiencing globalization in their own distinctive contexts. Because the U.S. economy remains by far the largest in the world, it is commonly and not without some reason perceived as the face of economic globalization. The world economy continues to be dominated by the U.S. economy, which remains more than twice as large as the second-largest national economy in the world at the end of the first decade of the 21st century. In some ways, the U.S. economy is the hub of globalization. Americans tend to perceive globalization as increased trade with other countries around the world. Citizens in other countries, however, tend to perceive globalization as increased trade with the United States.

The ratio of per capita GDP between the highest-income and the lowest-income countries of the world was about 9 to 1 in 1870 but about 45 to 1 by 1990.

Globalization is happening all around the world economy, but its causes and consequences look rather different depending on one's viewpoint. Consider some of the different emphases and roots of globalization as perceived from the European Union, Russia and the transition economies, Japan, East Asia, China, India, the Middle East, Africa, Latin America, and the United States.

The gap between those with high and low incomes widened over the last century, and globalization was part of the reason for this disparity. But in the last few decades, the gap seems to have started shrinking. The next century may well be a time of economic convergence. The gap between high-income and low-income nations is wider at the start of the 21st century than it was late in the 19th century. For example, the ratio of per capita GDP between the highest-income and the lowest-income countries of the world was about 9 to 1 in 1870 but about 45 to 1 by 1990.

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The global economy is still far from being unified.

The same overall process of growth that caused divergence in incomes over the previous century may well bring convergence of incomes around the world in the next century. The Nobel laureate economist Robert Lucas described the pattern of global economic growth over the last two centuries as a horserace. Different horses—that is, countries—start the race at widely varying times. Those who start later are far behind but then run at a faster catch-up pace for a time. This kind of race results in divergence at first, as the early starters race ahead, but convergence later, as more countries enter the race and catch up. As with any prediction about the future, this one has spawned some controversy over whether convergence is taking place in recent decades or will take place in the future.

Despite setbacks or slow growth in some regions, from Latin America to Africa, the rapid growth in India, China, and East Asia has led to greater convergence in recent decades—and seems likely to continue. As mentioned earlier, international trade is only one of many sources of economic growth; others include national policies concerning education, investment, and markets. Thus, globalization played only a partial role in divergence; however, it will play a greater role in convergence, because the benefits of

globalization help nations that are behind economically to catch up more quickly. Nevertheless, globalization is not powerful enough to overcome local and national forces blocking economic growth, such as civil war or poor governance.

Would you rather live in an economy that experiences faster growth and a smaller economic gap between countries or an economy that experiences slower growth but is farther ahead of other countries? Economists typically choose faster growth and a smaller gap between countries, which is the current world situation, but many noneconomists would prefer a greater economic gap.

As globalization continues, lower-income countries will grow at a faster rate than the United States. Increases in trade of goods and services, as well as increased financial flows and immigration across international borders, seem highly likely. This growth will be driven by a combination of factors: lower communication and transportation costs, greater experience with international trade, and legal changes at the national and international levels that facilitate trade. Any predictions about the future of the world economy are always uncertain. Indeed, recent decades have seen numerous confident predictions about the world economy that turned out to be completely wrong. Over the last two centuries, from 1800 up to the present, the world economy has grown steadily at roughly 2% a year. Today, such countries as China and India are experiencing growth at 7 to 10% per year, and countries in East Asia have seen even faster growth. In a real sense, this time of globalization and growth is an enormous success story for U.S. international economic policy. The United States has argued for decades that other countries should open up their economies to trade and investment, promote greater education, and emphasize the private sector over government ownership; and many countries that have taken this advice are now thriving. As the 21st century unfolds, Americans will reap the benefits as well as face the consequences of our own excellent recommendations. ■

Suggested Reading

Fischer, "Globalization and Its Challenges."

"Global Economic Inequality: More or Less Equal?" *The Economist*.

International Monetary Fund, *World Economic Outlook* (published twice each year).

World Bank, *Global Economic Prospects* (published annually).

Questions to Consider

1. Do you think the future holds divergence or convergence for the incomes of people around the world?

2. What forces do you see as most powerful in either encouraging or discouraging economic globalization in the future?

3. Would you rather live in a country with 2% growth while the rest of the world has 1% growth or a country with 3% growth while the rest of the world has 5% growth, and why?

Glossary

agglomeration: When economic activity is concentrated in a certain geographic location—includes both benefits and costs.

Bank of Japan: The organization that conducts monetary policy for Japan's yen.

biofuels: Fuels made from agricultural products, such as corn-based ethanol.

brain drain: The concern that low-income countries will suffer because many of those with the highest level of skills or education may choose to emigrate to high-income countries.

Bretton Woods agreement: An international agreement signed in 1944 that helped to keep major exchange rates largely fixed until the early 1970s.

capabilities approach: The argument that in thinking about poverty, income is less important than whether people have a fair chance to develop their own human capabilities.

central bank: The organization that conducts monetary policy, including the Federal Reserve in the United States and the European Central Bank.

Council for Mutual Economic Assistance (COMECON): This organization managed the trade relationships between the Soviet Union and the countries under its sphere of influence.

credit crunch: A situation in which it becomes difficult to get loans, even for those willing to pay the going interest rate.

Depression: The worldwide economic downturn that started in 1929 and lasted well into the 1930s (also called the Great Depression).

deregulation: Reducing the extent to which government controls decisions about price and output in certain markets.

Doha round: The name for the most recent round of international negotiations to reduce barriers to trade as part of the World Trade Organization.

dollarization: When another country chooses to use the U.S. dollar as its currency.

Dutch disease: the nickname given by economists to countries in which the economy seems to suffer slow growth as a result of having large exports of oil or other natural resources.

East Asian tigers: A nickname for fast-growing countries of this region, typically including South Korea, Taiwan, Indonesia, Malaysia, Thailand, Singapore, and Hong Kong.

European Central Bank: The organization that conducts monetary policy for the euro.

European Coal and Steel Community: The initial step toward European Union taken in 1951.

European Community: A predecessor of today's European Union.

European Economic Community: An early predecessor of today's European Union created by the Treaty of Rome in 1957.

European Union: An economic and political partnership across 27 European countries.

exchange rate: The rate at which one currency is exchanged for another.

exports: Goods produced domestically but sold in another country.

Federal Reserve: The central bank for the United States, which controls monetary policy for the U.S. dollar.

fiscal policy: Tax and spending policies.

fixed exchange rates: Exchange rates set by the government and requiring government intervention to stay in place.

flexible exchange rates: Exchange rates determined by market forces.

foreign exchange reserves: When a country or central bank holds reserves in a different currency, such as the Bank of China holding U.S. dollars.

General Agreement on Tariffs and Trade (GATT): An international agreement to reduce barriers to trade, started in 1947 and evolving into the World Trade Organization in 1995.

globalization: The process of the world economy becoming more intertwined through trade and financial flows.

Gosplan: The committee most responsible for state planning of the economy in the USSR.

Great Depression: The worldwide economic downturn that started in 1929 and lasted well into the 1930s (sometimes just called the Depression).

gross domestic product (GDP): A standard measure of the size of an economy in terms of total goods and services produced.

Heavily Indebted Poor Countries (HIPC): The name of an initiative started in 1996 to reduce the debts of low-income countries.

human capital: The skills and education of workers.

hyperinflation: Inflation at very high rates.

import substitution: A policy of economic development that seeks to produce manufactured and technology goods domestically, rather than importing them.

imports: Goods produced in another country and sold domestically.

industrial policy: A government policy of choosing and favoring certain industries.

Industrial Revolution: The period in the early 1800s when economic growth began to take off in the United Kingdom and the United States.

inflation: A general rise in the level of prices.

Intergovernmental Panel on Climate Change (IPCC): A group of scientists and government officials who put out the benchmark estimates for global warming.

International Bank for Reconstruction and Development (IBRD): One part of the World Bank.

International Monetary Fund (IMF): An international organization that seeks to minimize major exchange rate movements.

license raj: The nickname given to India's pervasive system of business regulation from the 1950s up to about 1991.

Lisbon agenda: A set of proposals to make Europe a more competitive, knowledge-based economy, arising out of a summit in 2000.

Malthusian: Referring to the arguments of the early 19^{th}-century economist Thomas Robert Malthus that population growth would eventually outstrip food supply.

megacities: Cities with a population of at least 10 million.

MITI: Japan's Ministry of Economy, Trade and Industry, which often took a leading role when Japan's government wished to intervene in the economy.

monetary policy: Policies to affect interest rates and the supply of credit in an economy, thus influencing both inflation and real economic activity.

“new economy”: A shorthand way of referring to the change in the U.S. economy since about 1995, when a surge of productivity growth based on information and communications technology began.

per capita GDP: GDP divided by population.

physical capital: Plant and equipment.

poverty trap: In development economics, the theory that because poor people in low-income countries are unable to save for the future, their countries will suffer low rates of investment and slow economic growth into the future.

privatization: Selling off state-owned firms to the private sector.

productivity: The amount produced per worker or per hour of work.

Protectionism: A desire to protect domestic producers from foreign competition by imposing tariffs or quotas on imported products.

purchasing power parity (PPP) exchange rate: The exchange rate at which the buying power of two currencies (measured in terms of internationally traded goods) is equal; an exchange rate often used for comparing the size of two different economies.

race to the bottom: The theory that countries will compete to attract international business by reducing their environmental and social laws and regulations.

stagflation: When a stagnating economy and high inflation occur at the same time; a term coined to describe the U.S. economy in the 1970s.

state-owned enterprises: Firms owned by the government.

sudden stop: The shorthand term for a situation in which a large amount of international financial capital has been flowing into a country, but the flow then reverses itself.

trade balance: Exports equal to imports.

trade deficit: Imports greater than exports.

trade surplus: Exports greater than imports.

Treaty of Rome: A 1957 treaty that established the European Economic Community, a forerunner of today's European Union.

unemployment: The situation that exists when workers who are willing to work for the wage that fits their skill and experience level are unable to find jobs.

urbanization: The historical process by which a higher percentage of people move to urban areas as an economy develops.

World Bank: An international organization that seeks to encourage development in low-income economies with loans and expertise.

World Trade Organization: An international agreement to reduce barriers to trade, started in 1995, evolving out of the GATT.

Bibliography

Abrams, Burton A. “How Richard Nixon Pressured Arthur Burns: Evidence from the Nixon Tapes.” *Journal of Economic Perspectives*. Fall 2006, 20:4, pp. 177–188. Economists have long asked the question: Why did the Federal Reserve allow inflation to get out of control in the 1970s? Broadly speaking, there are two explanations. One holds that many economists and policymakers had come to believe in the late 1960s and early 1970s that the Fed either couldn’t stop inflation or could do so at only a very high cost. The other explanation is that President Richard Nixon pressured the head of the Federal Reserve, Arthur Burns, to jumpstart the economy before the 1972 election—even though Burns strongly suspected that inflation would take off after the election. This article discusses and contrasts these arguments—both of which hold true to some extent.

Asher, David L. “What Became of the Japanese ‘Miracle?’ Economic Development in Japan: Economic Myths Explained.” *Orbis*. Spring 1996. http://findarticles.com/p/articles/mi_m0365/is_n2_v40/ai_18338847/pg_1. Asher walks step by step through the creation and rupture of Japan’s bubble economy. He discusses the elements of Japan’s previous growth that seem true in retrospect and those that seem like myth. He also argues that economic developments in Japan will affect the role that country is expected to play in the world, both economically and politically.

Banerjee, Abhijit, and Esther Duflo. “The Economic Lives of the Poor.” *Journal of Economic Perspectives*. Winter 2007, 21:1, pp. 141–168. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=942062 (working paper version). Banerjee and Duflo take a detailed look at the economic lives of those who live on less than $1 a day around the world. Using survey data, they look at consumer spending, savings, possessions, jobs and migration patterns, borrowing, and more. They come to the interesting conclusion that even on $1 a day, there is some degree of flexibility in the economic lives of the very poor.

Bertuch-Samuels, Axel, and Parmeshwar Ramlogan. “The Euro: Ever More Global.” *Finance and Development*. March 2007. 44(1). http://www.imf.org/external/pubs/ft/fandd/2007/03/bertuch.htm. Will the euro overtake the U.S. dollar as the world’s primary currency? Although the euro gained remarkably widespread acceptance in its first decade or so, it remains primarily used for transactions related to Europe in one way or another. At least so far, the U.S. dollar is not being seriously challenged by the euro as the world’s primary currency.

Bhagwati, Jagdish. “Borders Beyond Control.” *Foreign Affairs*. January/February 2003. http://www.cfr.org/publication.html?id=5356. Bhagwati is an eminent economist who supports free trade in goods and services. In this article, he proposes a World Migration Organization that would help coordinate low-income and high-income countries to maximize the benefits and hold down the costs of international immigration.

Bloom, David E., and Jeffrey D. Sachs. “Geography, Demography, and Economic Growth in Africa.” In *Brookings Papers on Economic Activity 2: 1998*, pp. 207–295. Bloom and Sachs lay out in detail the factors related to geography and climate that have hindered economic growth in Africa. In particular, the first part of the article (pp. 207–251) is accessible to any informed reader. The remainder of the article sets out a mathematical model and some statistical tests that are of greater interest to professionals and college students.

“Briefing: Business in South-East Asia: The Tigers That Lost Their Roar.” *The Economist*. March 1, 2008, pp. 73–75.This article focuses on the question of why Southeast Asia has spawned so few firms that produce world-class products, despite the region’s decades of economic growth. It discusses issues of corruption and entrenched elites and offers a sense of the challenges that these economies face in trying to make the transition from middle- to high-income nations.

“Briefing: Food and the Poor: The New Face of Hunger.” *The Economist.* April 19, 2008, pp. 32–34. Sharply rising food prices pose an especially major problem for several billion of the poorest people around the world, who have little room in their budgets to adjust. Given that many of these

poor people are also farmers, it is hoped that they will see their incomes rise as a result of higher food prices. But many low-income countries are trying to hold down food prices for the benefit of consumers, without regard for incentives to producers.

"Briefing: Food Prices: Cheap No More." *The Economist*. December 8, 2007, pp. 81–83. This useful article summarizes an amazing change in agricultural markets: the shift from several decades of cheap food to what looks as if it will be some years of expensive food. The primary reason for the change lies in demand for food—supply is actually quite high. The main drivers behind the demand are increasing needs in such countries as China and India and biofuels policies.

"Briefing: Russia's Economy: Smoke and Mirrors." *The Economist*. March 1, 2008, pp. 27–29. This article surveys the extent to which Russia's economic growth in the last 10 years or so has depended on higher oil prices. It also argues that Russia has experienced an eroding rule of commercial law over this time; thus, even though higher energy prices have made Russia's economic growth look strong, the underlying development of Russia's private-sector economy has not proceeded as well as it otherwise might have.

Burton, David, and Alessandro Zanello. "Asia Ten Years After." *Finance and Development*. June 2007, 44:2. http://www.imf.org/external/pubs/ft/fandd/2007/06/burton.htm. This useful summary reviews what has happened in the 10 years since the financial crisis of 1997–1998 in Asia. It also considers the economic to-do list for the region if rapid growth is to resume.

Buvinic, Mayra, and Elizabeth M. King. "Smart Economics." *Finance and Development*. June 2007, 44:2. http://www.imf.org/external/pubs/ft/fandd/2007/06/index.htm. This article offers an accessible introduction to the reasons why better opportunities and fairer treatment of women offer real economic payoffs. The same issue of the publication includes two other articles on gender inequality and development: "Getting All Girls into School," by Maureen A. Lewis and Marlaine E. Lockheed, and "Budgeting with Women in Mind," by Janet G. Stotsky.

Cardoso, Eliana, and Ann Helwege. *Latin America's Economy: Diversity, Trends, and Conflicts*. Cambridge, MA: MIT Press, 1992. This readable book discusses the evolution of Latin America's economy up to the late 1980s. It includes chapters on the long-term evolution of the economy through the 19th century and the first part of the 20th, a chapter on import substitution and trade liberalization, and chapters on the debt and inflation crises of the 1980s.

Christian Aid. "Fuelling Poverty: Oil, War, and Corruption." 2003. http://212.2.6.41/indepth/0305cawreport/fuellingpoverty.htm. This well-written report is from a nongovernment organization devoted to fighting poverty around the world. It summarizes much of the research literature and folk wisdom around the resource curse and offers specific examples of problems in Angola, Sudan, and Kazakhstan. The organization's Web site has a section on resource-related corruption, a problem that doesn't involve just oil but also copper and other resources.

Conte, Christopher, and Albert Karr. *An Outline of the U.S. Economy*. U.S. Department of State, 2001. http://usinfo.state.gov/products/pubs/oecon. This free online book offers an overview of many aspects of the U.S. economy. Chapter 3, "The U.S. Economy: A Brief History," discusses U.S. economic experiences after World War II, through the good years of the 1960s, to the stagflation and productivity slowdown of the 1970s, and thereafter. Chapter 7, "Monetary and Fiscal Policy," also offers insights about how inflation got started in the 1970s and was put to rest in the 1980s. Produced by two former reporters for the *Wall Street Journal*, the book is well written and aimed at a generalist audience.

Council of Economic Advisers. "Economic Report of the President." Various years. http://www.gpoaccess.gov/eop/index.html. The Council of Economic Advisers is an office within the White House. The three members of the council are usually academic economists who are in Washington for only a few years before returning to their institutions—which helps to keep them intellectually honest. Each February, the council publishes an annual report. The first chapter or two is always an overview of the U.S. economy in the previous year. Later chapters take on particular topics; for example, the 2008 report includes chapters on "Credit and Housing Markets," "The Importance

of Health and Health Care," and "The Nation's Infrastructure." Readers sometimes have to put up with a mild level of pro–White House propaganda in the report, but it always includes a hefty dose of useful background facts and analysis. The report also includes basic statistical tables for the U.S. economy going back several decades.

Crook, Clive. "A Cruel Sea of Capital." *The Economist*. May 1, 2003. Crook is one of the best-informed and most thoughtful economics journalists. In one of *The Economist*'s middle-of-the-issue essays, he begins by pointing out that global financial markets have expanded a great deal. This expansion offers extraordinary access to private-sector financial capital for countries that have traditionally found it hard to access such markets, but it also brings a real risk that pressures from financial markets can lead to dislocations and disruptions of national economies.

———. "India's Economy." *The Economist*. February 22, 1997. Crook is one of the fine economic journalists of our time. In one of the middle-of-the-issue survey articles that *The Economist* does so well, he looks at the changes from economic reform in India just a few years after they took place. His discussion gives a useful sense of just how constricted India's economy was by the license raj before the reforms—and how the reforms of 1991 were really only a first step toward the broader economic changes India needs.

Das, Gurcharan. *India Unbound: A Personal Account of a Social and Economic Revolution from Independence to the Global Information Age.* New York: Alfred E. Knopf, 2000. Das is a journalist and columnist who, in various ways, grew up with India. He was a boy at the time of independence. His family moved to America in the 1950s. He attended Harvard, then went back to India to work as a business executive who has often crossed paths with top government and industry leaders. He tells the story of India from independence up through the 21st century in a way that mixes interesting anecdotes and episodes with economic facts and background. This immensely readable book conveys both the attraction of India's early policies and the disillusionment they later caused for many. Chapters 1–14 cover the period from India's independence to the reforms of 1991. Chapters 15–23 cover the first decade or so after the economic reforms of 1991.

Easterly, William. *The White Man's Burden: Why the West's Efforts to Aid the Rest of the World Have Done So Much Ill and So Little Good.* New York: Penguin Press, 2006. Easterly is a former World Bank economist and a foreign aid skeptic who knows as much about actual experience with foreign aid as anyone. He argues that the time has come to shun "planners," who have grand schemes to end poverty, and to rely more on "searchers," who help ensure that goods and services actually reach the poor. Easterly also argues that those who distribute foreign aid have used their financial resources to impose their own shifting visions of development policy on poor countries—policies that have often not worked well. For an argument favoring foreign aid, see the book by Jeffrey Sachs.

Eichengreen, Barry. *The European Economy since 1945.* Princeton, NJ: Princeton University Press, 2007. Eichengreen is one of the leading writers on international macroeconomic developments in the 20th century. In this book, he offers a readable history of developments in the European economy since World War II, both summarizing and drawing lessons from the research literature. Chapters 2, 6, and 7 are especially relevant to Lecture 4.

———. "Old Europe on the Comeback Trail." *Milken Institute Review*. 1st quarter 2008. http://www.milkeninstitute.org/publications/review/2008_1/26-37mr37. pdf (free registration required for access). One often hears dire predictions for Europe's economy: aging workforce, too much government, too much vacation, too little Capitalism. Eichengreen recognizes all these issues but offers the useful reminder that Europe's economy has actually performed quite well over the last few decades. Europe is clearly a high-income part of the world with genuine economic strengths and, Eichengreen argues, a hopeful economic future.

Emmett, Ross B. "Malthus Reconsidered: Population, Natural Resources, and Markets." PERC Policy Series PS-38. November 2006. http://www.perc.org/pdf/ps38.pdf. Emmett undertakes several tasks in this useful essay. He offers an overview of Malthus's beliefs and puts them in the context of modern debates about overpopulation. He also makes the argument (somewhat controversially) that Malthus was not as dire in his predictions about the likelihood and consequences of overpopulation as he has been portrayed.

Ericson, Richard. “The Classical Soviet-Type Economy: Nature of the System and Implications for Reform.” *Journal of Economic Perspectives*. Fall 1991, 5:4, pp. 11–27. Ericson offers an overview of how the central planners attempted to operate the Soviet-type economy, looking not only at goods and services but at such elements of the economy as money and banking and foreign trade. Given the extremely interconnected nature of central planning, Ericson believes that partial reform was bound to be difficult and that total replacement of the system was probably necessary.

European Union. “The History of the European Union.” http://europa.eu/abc/history/animated_map/index_en.htm. For a basic if somewhat sketchy history of the start and evolution of the European Union, chock-full of dates and events, this Web site is a good starting point.

Federal Reserve Bank of New York. “The Basics of Foreign Trade and Exchange: Foreign Currency Exchange.” http://www.newyorkfed.org/education/fx/foreign.htm. The New York branch of the Federal Reserve handles most of the U.S. government’s foreign exchange transactions. This Web site offers an informative overview for the general public of how foreign exchange markets work, who participates in those markets, and the choices between fixed and floating exchange rates.

Fischer, Stanley. “Globalization and Its Challenges.” *American Economic Review: Papers and Proceedings*. May 2003, pp. 1–30. http://www.iie.com/fischer/pdf/fischer011903.pdf. Fischer is one of the fine macroeconomists of our time. In this public lecture, he considers many of the issues surrounding globalization from the position of a cautious advocate. For example, he looks at whether poverty and inequality are rising or falling, whether globalization helps economic growth, whether the international financial system is too crisis-prone, whether international trade is fair, and at levels of foreign aid. Many of these subjects have been introduced throughout this course, and by the time you near the end of this lecture series, you should be primed for reading articles like this one.

Fogel, Robert W. “Capitalism and Democracy in 2040.” *Daedalus*. Summer 2007, pp. 87–95. Fogel won the Nobel Prize in economics in 1995. His primary focus in recent years has been the study of economic growth. Here,

he polishes up his crystal ball to take a look at the expected patterns of the world economy several decades into the future. No one can see the future, of course, but some people's predictions—like Lucas's—are more valuable than others

Gall, Norman. "Mending Brazil's Megacity." *Wilson Quarterly.* Summer 2007, pp. 14–21. http://www.braudel.org.br/en/noticias/midia/pdf/wilson_20072.pdf (Web site of the Braudel Institute). This readable article focuses on São Paulo in Brazil, which is the center of an urban area that includes perhaps 20 million people. It has had all the problems of megacities in low-income countries: urban slums, population growth outstripping public services, crime, pollution. But it also has a diverse and growing economy and many personal and business connections to the world economy. The local government is showing some ability to grapple with its problems.

"Global Economic Inequality: More or Less Equal?" *The Economist*. March 11, 2004. This useful article summarizes many of the arguments in the academic literature over how globalization is affecting inequality around the world. The ultimate answer seems to be that inequality is declining in recent decades, but issues of data and interpretation make the question more complex than it may at first appear.

Her Majesty's Treasury. *The Single Market: A Vision for the 21st Century*. January 2007. http://www.hm-treasury.gov.uk/media/E/0/eer_singlemarket21_21.pdf. The first chapter of this report, "Past, Present and Future—An Assessment of the Single Market," offers a short and readable overview of what the single market has accomplished so far and what challenges are ahead.

Hill, Christopher T. "The Post-Scientific Society." *Issues in Science and Technology*. Fall 2007. http://www.issues.org/24.1/c_hill.html. Hill argues that the second half of the 20th century was a time of science-based economic growth, in the sense that such companies as AT&T, General Electric, and others were built on turning new scientific discoveries into useful products. He further argues that the 21st century is seeing the arrival of a post-scientific society, still very much based in science but in which many of the economic

gains and transformations are more related to broad-based integration of knowledge and capacities.

Hoshi, Takeo, and Anil K. Kashyap. "Japan's Financial Crisis and Economic Stagnation." *Journal of Economic Perspectives*. Winter 2004, 18:1, pp. 3–26. The authors discuss in some detail the internal mechanisms of Japan's financial system and how, in the aftermath of the bubble economy, these institutions have combined to create severe problems for the Japanese economy. Even in 2003, these issues were far from resolved.

Ilzkovitz, Fabienne, Adriaan Dierx, Viktoria Kovacs, and Nuno Sousa. "Steps Towards a Deeper Economic Integration: The Internal Market in the 21st Century. A Contribution to the Single Market Review." 2007. http://ec.europa.eu/citizens_agenda/single_market_review/docs/ecp271_en.pdf. This report from the European Commission provides a detailed and exhaustive but completely nontechnical overview of what the single market initiative has done in Europe and the main challenges that European economic integration still faces.

International Monetary Fund (IMF). "Climate Change and the Global Economy." Chapter 4 in *World Economic Outlook*. April 2008. http://www.imf.org/external/pubs/ft/weo/2008/01/pdf/c4.pdf. Analysts at the International Monetary Fund describe the macroeconomic and financial consequences of policies to address climate change. According to the authors, the overall effect on world growth of such policies, spread over several decades, would be relatively small, but the costs would also be unevenly distributed around the world. This chapter offers an overview of a number of economic studies of the costs and benefits of climate change and the policies for reducing carbon emissions.

———. *Regional Economic Outlook: Sub-Saharan Africa*. April 2008. http://www.imf.org/external/pubs/ft/reo/2008/AFR/eng/sreo0408.pdf (or type the title into a search engine). This *Outlook* report typically comes out twice a year. The first section is an evolving report on the current situation of Africa's economy, usually with some perspective going back 5 to 10 years. Later sections of the report sometimes focus on particular topics; for

example, the 2008 report discusses private capital flows to Africa and power-supply issues.

———.“What Is the IMF?” September 30, 2006. http://www.imf.org/external/pubs/ft/exrp/what.htm. This essay offers an overview of the IMF, including why it was created, where its money comes from, how it decides on loans, and more. The page also has links to other fact sheets and history.

———. *World Economic Outlook.* Published twice each year; available at the IMF external Web site. http://www.imf.org/external/index.htm (or type “World Economic Outlook IMF” into a search engine). This semiannual report always begins with an overview of the current state of the world economy, working its way around the regions of the world. It then offers several chapters on broader topics. For example, the October 2007 report has chapters on “Globalization and Inequality” and “The Changing Dynamics of the Global Business Cycle.”

International Organization for Migration. *World Migration 2005: Costs and Benefits of International Migration*. http://www.iom.int/jahia/Jahia/cache/offonce/pid/1674?entryId=932. The International Organization for Migration is a leader in the attempt to work out migration issues. It has more than 120 countries as its members. Every two to three years, it puts out a lengthy report that summarizes the current state of affairs on migration. This edition focuses on costs and benefits of migration but also includes discussion of other issues and detailed statistical tables.

Inter-Parliamentary Union. “Women in Politics: 60 Years in Retrospect.” 2006. http://www.ipu.org/PDF/publications/wmninfokit06_en.pdf. The Inter-Parliamentary Union is a small international organization headquartered in Switzerland, with about 140 member countries. The first few sections of this report are detailed, eye-glazing tables, country by country, about women in different parliaments. However, the sixth part of the report has some interesting discussion of the patterns of women in politics over time and their underlying causes.

Kuran, Timur. *Islam and Mammon: The Economic Predicaments of Islamism*. Princeton, NJ: Princeton University Press, 2004. This book collects six essays

that Kuran has written on the relationship between Islam and economic development, along with an overview of his work. He is cautious about drawing connections but quite willing to do so with appropriate context. In some of the essays, Kuran reaches back to the interactions between Islam and economic institutions several centuries ago. In others, he looks at the practice of "Islamic banking"—which does not involve interest—in more recent times.

———. "Why the Middle East Is Economically Underdeveloped: Historical Mechanisms of Institutional Stagnation." *Journal of Economic Perspectives*. Summer 2004, 18:3, pp. 71–90. This essay summarizes some of Kuran's thinking about the interaction of Islamic law, economic institutions, and economic development. The focus is extremely long term—that is, how economies of the Middle East have evolved over the centuries.

Landsburg, Steven E. "Save the Earth in Six Hard Questions: What Al Gore Doesn't Understand about Climate Change." *Slate*. October 22, 2007. http://www.slate.com/id/2176156/. Landsburg has, for some years, written a lively and entertaining "Everyday Economics" column for the online magazine *Slate*. In this article, he poses six questions about facts and values related to global warming. He emphasizes the idea that, from an economic point of view, deciding on answers to these questions is the basic precondition for figuring out what and how much to do about global warming. These six questions represent the kind of arguments that economists and policy analysts should consider in looking at global warming.

Lardy, Nicholas. "China: Rebalancing Economic Growth." Chapter 1 in *The China Balance Sheet: 2007 and Beyond*. May 2, 2007. http://www.chinabalancesheet.org/Publication.html#CBS_in_2007. Lardy is an expert on China who was translating Chinese government economic plans for Western audiences back in the 1970s. He argues that China must shift its economy away from growth based on ultra-high levels of investment and exports and, instead, focus on growth rooted in consumption—which includes higher spending on education and health. The Web site includes a number of readable papers from a May 2007 conference on China's economic and political prospects.

Lee, Ronald, and Andrew Mason. "What Is the Demographic Dividend?" *Finance and Development*. September 2006, 43:3. http://www.imf.org/external/pubs/ft/fandd/2006/09/basics.htm. The authors are economists and demographers. They explain how the demographic transition has proceeded around the world and offer some graphs and examples. They also explain the "demographic dividend"—that is, the reasons why the decades when the birthrate is slowing down can be especially productive for economic growth.

Lincoln, Edward J. "International Economic Relations." Chapter 5 in *A Country Study: Japan*. http://lcweb2.loc.gov/frd/cs/jptoc.html. The Library of Congress has published a number of country studies that are available on the Web. These studies are not continually updated, so they are often not useful resources for the last decade or two. But they can be quite helpful as an overview of the political and economic development of different countries through the 20th century and back into the 19th century, as well. This chapter systematically works through Japan's patterns of international economic relations, including discussion of MITI subsidies for industry and trade policies.

Lindsey, Brink, and Aaron Lukas. "Revisiting the 'Revisionists': The Rise and Fall of the Japanese Economic Model." Cato Institute Trade Policy Analysis #3. July 31, 1998. http://www.freetrade.org/pubs/pas/tpa-003.html. The authors quote numerous sources who believed into the late 1980s and early 1990s that Japan's economic model was obviously superior to the U.S. economic model—and were quite brusque in dismissing anyone who believed otherwise. This essay was written after the bursting of Japan's bubble economy, when Japan's economy entered a period of stagnation. Politely but clearly, the essay reminds those who were sure that Japan's economic model would overtake that of the United States of just how wrong they were.

Meredith, Robyn. "The Elephant and the Dragon." *Milken Institute Review*. 4th quarter 2007, pp. 61–78. http://www.milkeninstitute.org (free registration required for access). Meredith's book of the same title compares the economic prospects of China and India. The excerpt reprinted here discusses the challenges facing India as parts of its economy begin to compete with

advanced technology at the global level while other parts remain in some of the deepest poverty found anywhere in the world. The author is a senior editor for *Forbes*; thus, her writing has less pure economics but a lot of the lively snap-and-crackle of the well-chosen anecdote and well-posed question.

Metcalf, Gilbert E. "An Equitable Tax Reform to Address Global Climate Change." Hamilton Project Discussion Paper 2007-12. October 2007. http://www.brookings.edu/papers/2007/10carbontax_metcalf.aspx. This practical and detail-oriented paper lays out how a carbon tax that starts at $15/ton and increases over time would work to reduce climate change. Metcalf proposes that the revenue from the tax be used to reduce income taxes. As economists see it, the main alternative to a carbon tax is a "cap-and-trade" approach, which is advocated in the paper by Robert Stavins on this reading list.

Metraux, Daniel A., and Kellie Ann Warner. "The Character and Structure of the Economy." Chapter 4 in *A Country Study: Japan*. http://lcweb2.loc.gov/frd/cs/jptoc.html. The Library of Congress has published a number of country studies that are available on the Web. These studies are not continually updated, so they are often not useful resources for the last decade or two. But they can be quite helpful as an overview of the political and economic development of different countries through the 20th century and back into the 19th century, as well. This chapter systematically works through Japan's patterns of economic development, looking at workers, businesses, and government policy.

Ndulu, Benno, with Lopamudra Chakraborti, Lebohang Lijane, Vijaya Ramachandran, and Jerome Wolgin. *Challenges of African Growth: Opportunities, Constraints and Strategic Directions.* Washington, DC: World Bank, 2007. http://siteresources.worldbank.org/AFRICAEXT/Resources/AFR_Growth_Advance_Edition.pdf. A group of leading African economists gives a good overview of current thinking about Africa's economy. They review Africa's growth experience over the last 45 years or so and discuss key challenges and policies. They especially emphasize the importance of investment climate, infrastructure, innovation, and institutional capacity. Chapter 2 discusses "Africa's Long-Term Growth Experience in a Global Perspective," which offers a perspective back to about 1960. The first

part of chapter 4, “Constraints to Growth,” has some discussion of the fact that Africa’s geography and climate are not especially favorable to growth.

Oppenheimer, Andrés. *Saving the Americas: The Dangerous Decline of Latin America and What the U.S. Must Do*. Mexico: Random House Mondadori, 2007. Oppenheimer is a U.S.-based journalist who is one of the better commentators on Latin American affairs. In this lively and well-written book, he looks at Latin America in the context of the rest of the world economy—especially in comparison with East Asia, China, and parts of Europe. He offers chapters on events and issues in Brazil, Mexico, and Argentina. His theme is that Latin America is in danger of accepting a path toward reduced economic relevance as its destiny and that the United States does not recognize the costs and dangers associated with that outcome.

Organisation for Economic Co-operation and Development (OECD). *China in the World Economy: The Domestic Policy Challenges*. http://www.oecd.org/dataoecd/45/57/2075272.pdf. This 72-page summary of a much longer report discusses China’s economic reforms from 1978 up to 2000. The fundamental argument is that by about 2000, China had achieved most of the possible economic gains from freeing up particular industries, such as agriculture, or allowing prices to vary. The report also reviews the changes that have been made and argues that looking ahead, China will need to deal with broader issues affecting the entire economy.

———. “Exchange Market Volatility and Securities Transaction Taxes.” Chapter 8 in *OECD Economic Outlook*. June 2002. http://www.oecd.org/dataoecd/38/26/1937989.pdf. For some time, policymakers have suggested that a tax should be imposed on all exchange rate transactions around the world. The hope is that such a tax might diminish the volatility of exchange rates, because those in financial markets who trade frequently would have an incentive to trade less. However, there are also concerns that such a tax is impractical and could end up imposing costs on low-income countries that often have the most need for international transactions. This chapter reviews the evidence on exchange rate volatility and discusses the pros and cons of a securities transaction tax.

———. *OECD Economic Surveys: China.* September 2005. The OECD's membership in 2007 included 30 countries "committed to democracy and the market economy." Historically, this has meant the high-income countries of the world. In recent years, however, the OECD has started talks with Russia, India, China, and Brazil about joining, which suggests that its focus is broadening to include major economies everywhere. Reports from the OECD are a consistently high-quality source of outsider analysis on specific countries and economic issues that cut across countries. This report focuses in particular on reforming the business sector and government finances.

———. *OECD Economic Surveys: Russian Federation*. November 2006, vol. 2006-17. One of the OECD's well-done country studies. This overview of Russia's economy focuses on how to sustain Russia's economic growth with a focus on innovation, public sector management, and health care issues.

———. *The OECD Jobs Study: Facts, Analysis, Strategies.* 1994. http://www.oecd.org/dataoecd/42/51/1941679.pdf. The OECD is a Paris-based international think-tank that puts out reports on issues of particular interest to high-income countries around the world. This study lays out in detail what Europe's unemployment problem looked like in the mid-1990s: high unemployment rates, long term to a large degree and brought on by combinations of well-intended but poorly designed policies that reduced incentives to work and hire. This study crystallized a consensus and was quoted and referenced for years after it appeared.

Organisation for Economic Co-operation and Development and UN Food and Agriculture Organization (FAO). *OECD-FAO Agricultural Outlook, 2008–2017: Highlights*. 2008. http://www.agri-outlook.org/dataoecd/54/15/40715381.pdf. The second chapter of this report is called "Are High Prices Here to Stay?" It discusses the effects of rising demand because of higher incomes and biofuels policies and offers estimated prices for the next decade. This report is updated annually. The UN FAO also has a useful Web site with facts and reports about high food prices around the world at http://www.fao.org/worldfoodsituation/en/.

Perkins, Dwight. "Completing China's Move to the Market." *Journal of Economic Perspectives*. Spring 1994, 8:2, pp. 23–46. Perkins was probably the foremost Western authority on China's economy for years leading up to the reforms of 1978 and, thus, was extremely well placed to put them in context. In this essay, he emphasizes how changes in rural markets and foreign investment were crucial to the early stages of China's market-oriented reforms.

———. "History, Politics, and the Sources of Economic Growth: China and the East Asian Way." In *China in the Twenty-First Century: Politics, Economy, and Society*, Fumio Itoh, ed., pp. 25–41. Tokyo: United Nations University Press, 1997. In this chapter, Perkins offers an overview of many of the issues facing China's economy from the 1940s into the 1970s—before the economic reforms started. Perkins gives a sense of the economic chaos of that period and of one transition—the shift to becoming a high-saving economy—that has turned out to be helpful in the recent decades of rapid growth for China.

Porter, Michael E., and Mariko Sakakibara. "Competition in Japan." *Journal of Economic Perspectives*. Winter 2004, 18:1, pp. 27–50. It is commonly believed that the competitive market environment in Japan is less subject to laissez-faire policies than that in the United States. For these authors, it is more accurate to state that some Japanese industries have fierce competition while others do not. In addition, those industries that experience fierce competition tend to be those that are most successful in international markets. Levels of competition in other areas are generally increasing in Japan.

Pritchett, Lant. *Let Their People Come: Breaking the Gridlock on Global Labor Mobility*. Washington, DC: Center for Global Development, 2006. http://www.cgdev.org/content/publications/detail/10174 (available for purchase or free download). In this very readable book, Pritchett lays out five irresistible forces leading to more migration, eight immovable ideas blocking greater migration, and six accommodations for politically acceptable, development-friendly migration.

Rajan, Raghuram. "The Future of the IMF and the World Bank." *American Economic Review*. May 2008. http://faculty.chicagogsb.edu/raghuram.rajan/research/Future%20of%20IMF%20and%20World%20Bank.pdf. Rajan is a distinguished economist at the University of Chicago who served for several years as chief economist at the International Monetary Fund. Thus, his discussion of the future of the IMF and the World Bank—written soon after he had returned to academia—comes from a deeply informed insider's perspective. He emphasizes the idea that the traditional roles of these institutions have become outdated and discusses how their core functions might be strengthened and preserved in a globalizing world.

Reid, Michael. *Forgotten Continent: The Battle for Latin America's Soul.* New Haven, CT: Yale University Press, 2007. The author is a journalist who has covered Latin America for decades, including for *The Economist* magazine for the last decade or so. Chapters 4 and 5 of this book focus on Latin America's political and economic development from after World War II until the debt crisis. Somewhat dense, the book covers a broad range of facts and events. The remainder of the book may be of interest as a supplement to Lecture 20.

Roberts, Alan. "Open Up: A Special Report on Migration." *The Economist*. January 5, 2008, pp. 1–16. *The Economist* regularly publishes wonderfully informative middle-of-the-issue survey articles. In this one, Roberts points out that rich countries do gain overall from migration, but the benefits are unevenly spread. He also discusses how the various immigration policy choices are working and might work, including blocking migrants, allowing more permanent migrants, or allowing more temporary migrants.

Roodman, David. "Macro Aid Effectiveness Research: A Guide for the Perplexed." Center for Global Development, Working Paper 134. December 2007. http://www.cgdev.org/content/publications/detail/15003. This paper argues that although foreign aid has done a number of good things—prevented famines, ended diseases, and more—it is difficult to make a case that foreign aid has helped the overall rate of economic growth in recipient countries. Roodman reviews much of the recent economic literature on the effectiveness of foreign aid and discusses how to reconcile these conflicting findings.

Sachs, Jeffrey. *The End of Poverty: Economic Possibilities for Our Time.* New York: Penguin Press, 2005. Sachs makes perhaps the most powerful arguments of any economist in support of a vision of how greatly expanded foreign aid could lead to dramatic decreases in poverty. He is especially good at identifying specific examples of aid programs that could usefully be expanded. Much of this book represents something of a tour around the world economy, including stops in Latin America, Eastern Europe, Russia, China, and India. The last eight chapters have a particular focus on Africa and issues of foreign aid. For the counterarguments that take a skeptical view of foreign aid, see the book by William Easterly on this reading list.

Scheller, Hanspeter K. "The European Central Bank: History, Role and Functions." 2nd ed., 2006. http://www.ecb.int/pub/pdf/other/ecbhistoryrolefunctions2006en.pdf. This report offers a helpful introduction to the basics of the euro system. The first chapter focuses on the lead-up to the euro and some of the failed earlier attempts to stabilize foreign exchange rates across Western Europe. The second chapter is a legal and institutional description of the European Central Bank, and the third chapter is an overview of the principles that guide its policies. If you're interested in more detail about recent policies and economic evaluations of the European Central Bank, surfing around this Web site is a good place to start.

Sen, Amartya. "More Than 100 Million Women Are Missing." *New York Review of Books*. December 20, 1990, pp. 61–66. In this highly readable essay, Nobel laureate economist Sen lays out some grim facts showing that the number of women living in the world doesn't match up with basic facts on the number of women who were born. He then offers insight and informed speculation on what factors have led to women dying sooner at different stages of life.

Shleifer, Andrei. *A Normal Country: Russia after Communism.* Cambridge, MA: Harvard University Press, 2005. Shleifer discusses how Russia's economic transition took place, both in terms of the political constraints surrounding the choices made and the economic outcomes of those choices. He argues that Russia under Boris Yeltsin made enormous strides toward political and economic freedom. Warning: The exposition in this book sometimes involves economic graphs and statistical measures that will

be easy to understand for readers with some background in economics or statistics but may prove difficult for readers without such background.

Shleifer, Andrei and Daniel Triesman. “A Normal Country.” *Foreign Affairs*. March/April 2004. http://www.foreignaffairs.org/20040301faessay83204/andrei-hleifer-daniel-treisman/a-normal-country.html. Shleifer and Triesman discuss the evidence that the transition away from Communism perhaps caused less disruption than has been widely perceived. They point out that if Russia is compared to other countries around the world with similar levels of per capita GDP, then many of its restrictions on political and media freedom, much of its economic inequality, and the shaky practice of the rule of law end up looking relatively normal.

Stavins, Robert N. “A U.S. Cap-and-Trade System to Address Global Climate Change.” Hamilton Project Discussion Paper 2007-13. October 2007. http://www.brookings.edu/papers/2007/10climate_stavins.aspx. A cap-and-trade system would set a limit on emissions of CO_2 and other greenhouse gases. Permits would be issued for businesses whose processes lead to emission of such gases, and the permits could be bought and sold. The permits would also “shrink”—that is, they would require a gradual downward level of emissions over time. This practical paper describes how a cap-and-trade system could work in the United States. As economists see it, the main alternative to a cap-and-trade approach is a carbon tax, which is advocated in the paper by Gilbert Metcalf on this reading list.

Stern, Nicholas. “Stern Review on the Economics of Climate Change.” London: Her Majesty’s Treasury, 2006. http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm. Stern is an eminent economist who was asked by the British government to put together a white paper on climate change issues. The resulting elegant paper offers an overview of all the issues, from the science to the economics to international policy. The report shows a bias toward the case for current action in various ways, such as choosing implausibly low discount rates. Nonetheless, Stern does an elegant job of breaking down the overall problem into specific issues and laying out how differing views on those issues will affect an overall conclusion.

Stone, Mark, Harald Anderson, and Romain Veyrune. "Exchange Rate Regimes: Fix or Float?" *Finance and Development*. March 2008, 45:1. http://www.imf.org/external/pubs/ft/fandd/2008/03/basics.htm. Three economists at the International Monetary Fund offer a crisp and concise overview of hard-peg (fixed), floating, and soft-peg exchange rates and the likely costs and benefits of each approach.

"The Sun Also Rises." *The Economist*. October 6, 2005. As one of the middle-of-the-issue surveys that *The Economist* does so well, this article argues that Japan has largely worked through the problems of the bubble economy that led to more than a decade of stagnation and is now ready to resume at least moderate economic growth. Some of the political discussion in the article is now outdated, but the economic analysis of how debt has been reduced and the economy has been made more flexible and deregulated offers useful background.

"A Survey of the Soviet Economy: Gorbachev's Gamble." *The Economist.* April 9, 1988. This middle-of-the-issue survey article was written at about the time that Mikhail Gorbachev was attempting to loosen up the centrally planned Soviet economy in a way that would encourage economic growth. Gorbachev's policies eventually did much more than he expected—indeed, they preceded the breakup of the Soviet Union. But this article gives a good sense of the dire situation of the Soviet economy in the late 1980s, after decades of central planning.

Taylor, Timothy. *Principles of Economics.* Freeload Press, 2008. http://freeloadpress.com. Some listeners might be interested in a more thorough, textbook-style treatment that explains the reasons for gains from trade and the arguments over import protectionism from an economic point of view. Chapters 3 and 6 of this book provide this kind of overview. The chapters of this book can be downloaded for free as PDF files, although there is a brief registration form to fill out, and the first page or two of your download will be advertising.

———. "Thinking about a 'New Economy.'" *The Public Interest*. Spring 2001, pp. 3–19. http://timothytaylor.net/articles/public_interest_spr_2001.pdf. In this article, I discuss the importance of the shift to the "new economy,"

including the economic importance of the rise in productivity and the ways in which advances in information technology manifest themselves in higher productivity.

———. "The Truth about Globalization." *The Public Interest*. Spring 2002, pp. 24–44. http://timothytaylor.net/articles/public_interest_spr_2002.pdf. In this essay, I argue that the overall effects of globalization are positive and worth defending. I also argue that both the benefits and the costs of globalization are often overstated and that globalization has much farther to go.

Transparency International. "FAQs for Journalists: Facts and Figures on Corruption." http://www.transparency.org/news_room/faq/journalists_faq. On this useful Web page, Transparency International takes a stab at offering short answers to many of the obvious questions journalists often ask about corruption. This is a good place to get quick answers to questions about whether corruption is increasing, the economic and noneconomic costs of corruption, whether corruption imposes outside standards on low-income countries, the successes of some countries in fighting corruption, and more.

———. *Global Corruption Report 2007*. http://www.transparency.org/publications/publications/gcr_2007. Transparency International is one of the best-known organizations that argues and collects information on corruption. This annual report examines the effects of corruption in one area each year. In 2007, the focus was on judicial corruption; in 2006, how corruption affects health services; in 2005, corruption in infrastructure.

Trehan, Bharat. "Changing Productivity Trends." Federal Reserve Bank of San Francisco Economic Letter, 2007-25. August 31, 2007. http://www.frbsf.org/publications/economics/letter/2007/el2007-25.html. A short and readable introduction to current academic thinking about the causes of the productivity slowdown of the 1970s. The author discusses the strengths and weaknesses of some of the common explanations, including higher oil prices, information technology, and changes in the service sector.

United Nations. "The Millennium Development Goals Report 2007." http://www.un.org/millenniumgoals/pdf/mdg2007.pdf. This report, which

comes out annually, is an easy-to-read overview of where the world stands with respect to the Millennium Development Goals. Because it is a summary report, it has a number of bar charts and short explanations and goes through all the issues in 20 pages or so.

———. *Population Challenges and Development Goals*. 2005. http://www.un.org/esa/population/publications/pop_challenges/Population_Challenges.pdf. This report offers an overview of demographic trends worldwide, including total population, as well as aging, fertility, death rates, and other issues, with breakdowns by region. It also has a section on population policies around the world.

———. *World Urbanization Prospects: The 2007 Revision*. "Executive Summary." February 26, 2008. http://www.un.org/esa/population/publications/wup2007/2007WUP_ExecSum_web.pdf For those who want underlying numbers and trends without a lot of fancy writing, this regularly updated and revised UN survey is the place to turn. This summary shows trends in urban and rural populations projected ahead several decades and divided by region of the world. It also shows projections for megacities and offers an overview of government dissatisfaction with the developing population patterns.

United Nations Development Programme (UNDP). *Arab Human Development Report 2002: Creating Opportunities for Future Generations.* New York: United Nations Publications, 2002. Available at a number of places on the Web, including http://www.ituarabic.org/hresources/Ar-Human-Dev.pdf. In this fascinating project, economists from the Middle East write more-or-less annual reports on factors that could help economic development. The reports have a political dimension—for example, they sometimes spend a paragraph or two recapping the Arab position in the Arab-Israeli conflict. But in their economic dimension, they often show some courage in delivering unpopular truths. This first report focuses on issues of governance, greater power for women, and access to knowledge. Later reports, available at the UNDP Web site, address other issues, such as the role of science and technology in the economies of the Middle East.

Varma, Amit. "Profit's No Longer a Dirty Word: The Transformation of India." February 4, 2008. http://www.econlib.org/library/Columns/y2008/Varmaprofit.html. Varma is a journalist who is highly knowledgeable about India. In this short article, he summarizes the historical context of India's reforms of the early 1990s. He also gives a sense of how the economy has evolved since that time and some of the country's current challenges.

Williamson, John. "The Choice of Exchange Rate Regime: The Relevance of International Experience to China's Decision." A lecture at a conference on exchange rates organized by the Central University of Finance and Economics in Beijing, September 7, 2004. http://www.iie.com/publications/papers/williamson0904.pdf. Williamson is one of the top experts on the practical policy side of exchange rates, and he is also a lucid expositor. In this lecture, he reviews the general issues of exchange rate policy, then offers advice that China should not (and probably cannot) seek to keep its exchange rate fixed at levels as low as occurred in the mid-2000s.

———. "Did the Washington Consensus Fail?" Outline of a speech at the Center for Strategic and International Studies, Washington, DC. November 6, 2002. http://www.iie.com/publications/papers/paper.cfm?ResearchID=488. In this short article, the economist who coined the term "Washington consensus" offers a reminder of what the term originally meant. He points out that the policies themselves can be debated, but they should be discussed on their merits, not that many of them are little more than economic common sense.

World Bank. "About Us." http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20046292~menuPK:51123588~pagePK:50004410~piPK:36602~theSitePK:29708,00.html (or type "World Bank" into your browser and click on "About Us"). This part of the World Bank Web site describes the institution. If you follow the links, you will find a short history of the World Bank, organizational charts, descriptions of workers, descriptions of the agencies within the bank, and links to other publications and research.

———. "Avoiding the Resource Curse." Oil and Gas: Petroleum Sector Briefing Note #3. May 2007. http://siteresources.worldbank.org/

INTOGMC/Resources/cambodia_oil_gas_newsletter_3.pdf. This essay describes the policies that four resource-rich, low-income countries have taken. In Nigeria, oil wealth seems to have made the economy worse off. In Indonesia, Malaysia, and Botswana, oil wealth seems to have helped the economies.

———. "East Asia and Pacific Update: 10 Years after the Crisis." April 2007. http://siteresources.worldbank.org/INTEAPHALFYEARLYUPDATE/Resources/550192-175629375615/EAP-Update-April2007-fullreport.pdf (or type "World Bank" and the title of the article into a search engine). Twice a year, the World Bank publishes this "East Asia and Pacific Update." This particular update has a chapter devoted to events since the financial crisis of 1997–1998 and includes a discussion of China. Of course, you can also look up more recent reports for updates on the region as a whole.

———. *The East Asian Miracle.* Oxford University Press: New York, 1993. This report is the canonical starting point for thinking about the growth experience of East Asia. To offer a sense of the contents over roughly 350 pages, here are the chapter titles: "Growth Equity and Economic Change," "Public Policy and Growth," "Macroeconomic Stability and Export Growth," "An Institutional Basis for Shared Growth," "Strategies for Rapid Accumulation," "Using Resources Efficiently: Relying on Markets and Exports," and "Policies and Pragmatism in a Changing World." The report is written in a fairly readable manner, with jargon and professional details pushed back into some chapter appendices that are easy to skip.

———. *Global Development Finance: The Development Potential of Surging Capital Flows*. 2006. http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/EXTGDF/EXTGDF2006/0,,menuPK:2344945~pagePK:64167702~piPK:64167676~theSitePK:2344908, 00.html. (or type "GDF 2006" into a search engine). This report appears annually. In the back of the report are statistical tables on international capital flows. The first chapter provides an overview of events in the previous year, and later chapters look at a particular subject. Thus, the 2006 report focuses on the conditions under which capital flows can assist development, while the 2007 report is subtitled *The Globalization of Corporate Finance in Developing Countries*. The 2007 report is available at

the following Web site: http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/EXTGDF/EXTGDF2007/0,,menuPK:3763156~pagePK:64167702~piPK:64167676~theSitePK:3763080, 00.html (or type "GDF 2007" into a search engine).

———. *Global Economic Prospects.* Published annually. Available at the World Bank Web site at http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/GEPEXT/0,,contentMDK:21021075~menuPK:51087945~pagePK:51087946~piPK:51087916~theSitePK:538110,00.html (or type "Global Economic Prospects World Bank" into a search engine). This annual report begins with an overview of the world economy, and the back of the volume has a useful appendix on "Regional Economic Prospects" that works its way around the main regions of the world in an approach similar to the structure of these lectures. Each annual report also focuses on a particular topic, usually related to economics.

———. "Governance as Part of Global Monitoring." Part II in *Global Monitoring Report 2006*, pp. 121–192. http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALMONITOR/EXTGLOBALMONITOR2006/0,,contentMDK:20810084~menuPK:2199415~pagePK:64218950~piPK:64218883~theSitePK:2186432,00.html (or type "Global Monitoring Report 2006" into a search engine). Chapter 5 of this report discusses approaches to measuring governance, including the Transparency International report, but also a number of others. Chapter 6 discusses ways of fighting corruption at lower levels of government through various kinds of monitoring and transparency. Chapter 7 covers international agreements to fight corruption. Informative examples are liberally sprinkled throughout the discussion.

———. "India: Inclusive Growth and Service Delivery: Building on India's Success—Development Policy Review." May 29, 2006. http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/DPR_FullReport.pdf. This report is written at a time when the faster growth in India's economy can be taken for granted; thus, the focus is on how to help that growth extend through space to reach more of the population and how to lay a basis for extending the growth through time. Much of the

emphasis is on the failure of India's government to provide adequate basic public services.

———. "Oil and Gas: A Blessing or a Curse?" Oil and Gas: Petroleum Sector Briefing Note #2. April 2007. http://siteresources.worldbank.org/INTOGMC/Resources/cambodia_oil_gas_newsletter_2.pdf (or type "World Bank" and the title of the article into a search engine). This four-page note does a nice job of summarizing the evidence on how oil and gas resources affect an economy—that is, sometimes for better but often for worse. The difference seems to depend on the society's institutions for spreading the oil and gas wealth across the economy as a whole and on whether the economy can develop a healthy non-oil sector, as well.

———. "Overview: The Making of a Miracle." In *The East Asian Miracle.* Oxford University Press: New York, 1993, pp. 1–26. This "Overview" chapter offers a readable summary of the arguments concerning the economies of East Asia during their period of rapid growth, from about 1965 into the early 1990s. For details about specific countries and information on investment, education, export promotion, macroeconomic stability, and much more, dip into the chapters in the rest of the report.

———. "PovertyNet: Understanding Poverty." http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/0,,contentMDK:20153855~menuPK:373757~pagePK:148956~piPK:216618~theSitePK:336992,00.html (or type "World Bank" and the title of the Web page into a search engine). The World Bank maintains this Web site as a place to gather together information about global poverty. This page offers an introduction to such issues as measuring poverty, trends in poverty rates, and policy responses to poverty. You can also surf and click the many links from this page to find more detailed discussions and data.

———. "Promoting Gender Equality and Women's Empowerment." Chapter 3 in *Global Monitoring Report 2007: Confronting the Challenges of Gender Equality and Fragile States.* http://www-ds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/04/11/000112742_20070411162802/Rendered/PDF/394730GMR02007.pdf > (or type "Global Monitoring Report 2007" into a search engine). Greater gender equality is one of the

Millennium Development Goals set by the United Nations. This chapter spells out why greater gender equality is important, summarizes some of the relevant evidence, and gives a sense of how gender equity should be measured and evaluated.

———. *World Development Report 2008: Agriculture for Development.* http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/EXTWDR2008/0,,menuPK:2795178~pagePK:64167702~piPK:64167676~theSitePK:2795143,00.html (or type “World Development Report 2008” into a search engine). The *World Development Report* is one of the annual flagship reports of the World Bank. Each year, the report covers a particular topic, drawing on a combination of academic research and the World Bank’s experience around the world. The 2008 report is on the role of agriculture in development; it details the struggles of countries around the world to adjust to rising food prices.

“The World Goes to Town: A Special Report on Cities.” *The Economist*. May 5, 2007. This special 14-page, middle-of-the issue survey begins with the fact that the world’s urban population has now outstripped the rural population. It offers a brief overview of cities throughout human history, then focuses on issues of infrastructure and governance and the idea that cities must continually reinvent themselves.

World Trade Organization (WTO). *The Future of the WTO: Addressing Institutional Challenges in the New Millennium*. 2004. http://www.wto.org/english/thewto_e/10anniv_e/future_wto_e.pdf. On the 10th anniversary of the establishment of the WTO, an outside committee was appointed to look at the long-term future of the organization. The committee’s report includes a number of interesting comments about trade agreements in a world of globalization, ongoing issues with national sovereignty, dispute resolution, and more.

———. “What Is the WTO?” Updated in February 2007. http://www.wto.org/english/thewto_e/whatis_e/whatis_e.htm. This page offers links to various documents that give a basic overview of the WTO. “What Is the WTO?” discusses the evolution of the agreements over time, the negotiation process, the Doha round, and more. Also on this site are short pamphlets on “10

Benefits of the WTO Trading System” and “10 Common Misunderstandings about the WTO,” along with links to a few educational videos.

Zachary, G. Pascal. “Trends: Africa Overreaches.” *Milken Institute Review*. 2nd quarter 2008, pp. 6–13. This article discusses the surge of increased education across Africa in the last decade or so, with some emphasis on the experience in Uganda. The article sets forth a number of provocative facts about the increase and discusses some possible parallels to mass education in East Asia and the United States. It also points out that Africa has a long way to go and that education pays off in more economic growth only over decades, as children become young adults and enter the workforce, not in a few years.

Zettlemeyer, Jeromin. “Growth and Reforms in Latin America: A Survey of Facts and Arguments.” IMF Working Paper WP/06/210. 2006. http://www.imf.org/external/pubs/ft/wp/2006/wp06210.pdf. This paper reviews some consistent patterns in the economy of Latin America: a lack of openness to foreign trade, macroeconomic instability, and high levels of inequality. It then discusses different views of why the economic reforms of the early 1990s have not led to greater improvement in economic growth.